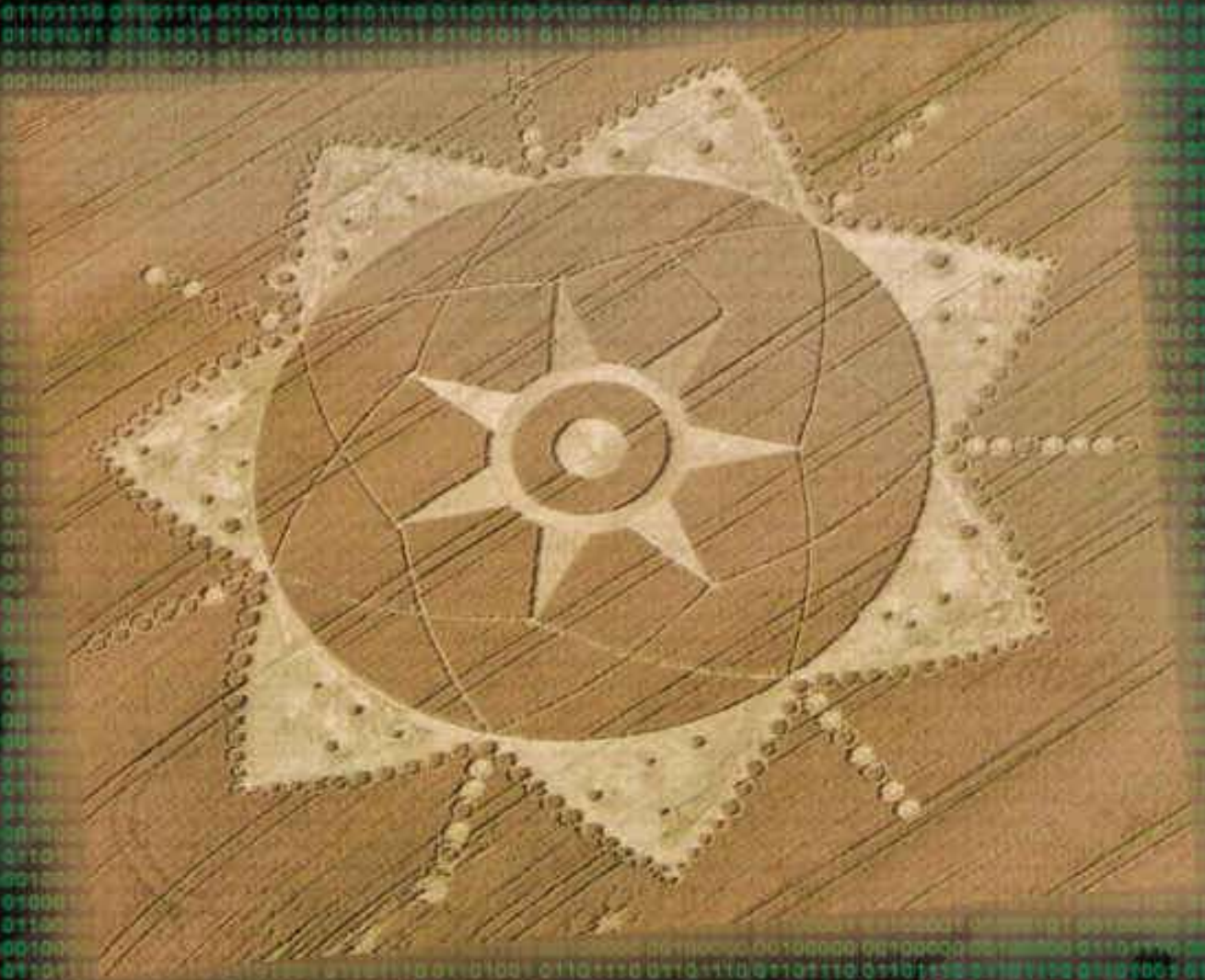
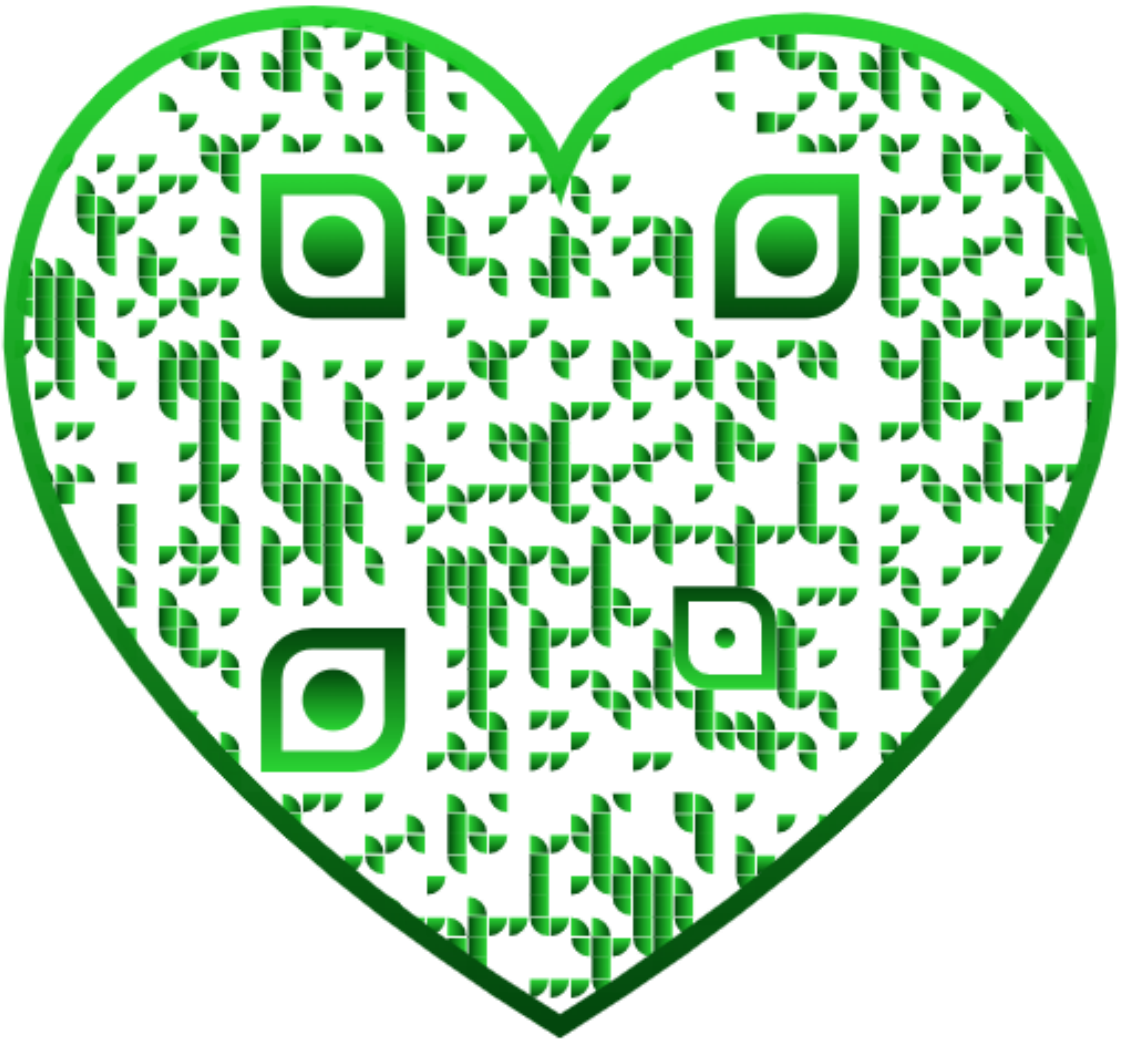
Francesco Grassi

CROP CIRCLES

Signs of Intelligence



UFOs, Aliens and Close Encounters of the Second Kind



Crop Circles:
Signs of Intelligence

UFOs, Aliens and Close Encounters of the Second Kind

Translated by Paolo Attivissimo

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FOREWORD

Crop circles are certainly an incredible phenomenon. Anyone who follows them superficially or doesn't know their details cannot understand the countless facets and logical paradoxes that they continue to offer since the days of the first formations, documented around 1980.

Those who, by chance or choice, curiously approach the circle's edge to explore it end up being drawn in by a vortex of tales, events, people, legends and myths that undoubtedly leave their mark. This vortex leads directly to the discovery of the complex nature of the human soul.

Crop circles are a giant circular stage on which many artists have been taking turns for decades at different times. Each one performs his number; some stay, others fade away. Some bring innovations, others recycle obsolete acts. There's always room for everyone on this stage, and there's always a new audience ready to applaud. Some stay, others fade, but the circular substructure is always there, firmly anchored with solid roots. This is a durable and persistent temple, built upon fragile *temporary temples* made of crops flattened to the ground. Art or hoaxes, believers or circlemakers: is there really a boundary between the elements involved? If so, what is it? When one travels in circles, one is inevitably forced to retrace one's own steps [1], and therefore, in a twisted circular game, all the elements continue to overlap each other and to become entwined, making the mystery even more inextricable. Paradoxically, that which appears clear when viewed at night becomes obscure when daylight arrives.

> [1] *"... we came in?"* This strange quotation will only make sense after you've finished reading this book. Moreover, to keep the content of this book consistent and coherent, you may access the reference sources mentioned in its notes by entering the following address in your browser: www.francescograssi.com/ebook/ccsoi/v01. There you will be able to access the content provided, if any, by clicking on the number of the note of interest.

So is it possible to somehow unravel this wildly tangled ball of string? Maybe. But to do so, everyone must carry their own tools on their shoulders. There, on the ground, are the backpacks that I've filled with everything you need. The main tool is right in your hands and all that's left to do is rewind the measuring tape back to the 1960s.

Welcome, ladies and gentlemen: what I am about to show you is the tramline [2] that leads into the field. Follow me, and we'll trace together our own circle, because that's where our circular voyage begins. It all starts with a UFO: the year is 1966.

[2] *Tramlines* are the lines of flattened plants that normally cross fields in pairs and parallel to each other. They are made intentionally by farmers and are used for the passage of farm vehicle wheels.

Welcome to Circle World. 1966: Tully, Australia.
Our circular journey begins here (credit: Giacomo Rinaldi).

AT THE CIRCLE'S EDGE

Three in the morning as England was snoring
There were two men in a field
As the moonlight was shining, they sat there dining
On cheese rolls and cans of beer

There's no better place for an English man
Than his countryside at dawn,
Telling legends and stories
In the land they were born...
And painting circles in the corn [1]

[1] A few brief verses will act as a guide and will introduce each of the three main sections of the book (except for the Appendices). At the end, after the conclusions, the reason for these verses will be revealed. The more romantically inclined readers will certainly wait for the circle to be slowly traced.

1966: Tully, Australia

On 19 January 1966, **George Pedley** witnessed a UFO sighting that changed his life forever. What Pedley couldn't imagine at time was that his experience and his report would also change the life of many other people in the years that followed.

It was about nine o'clock in the morning. George Pedley was driving his tractor from Tully, in Australia's Queensland, to go to work at Albert Pennisi's banana plantation a few miles to the south. As he approached Pennisi's farm, he heard a loud hiss, like a deflating tyre. The hiss became louder than the engine of the tractor, so Pedley looked around. That's how he saw, a few dozen feet away above the trees, an object that he was unable to identify. The object appeared to descend slightly and then leave at high speed and vanish. As he continued driving the tractor, Pedley saw an almost circular depression in the tall grass of the lagoon. The lagoon had about five feet of water and was surrounded by reeds and grass, and that depression, measuring approximately thirty by twenty feet, appeared to have been produced by the UFO [2] he'd just seen.

> [2] *UFO* is the acronym of *Unidentified Flying Object*. A UFO sighting occurs when a person sees something unusual in the sky that he or she is unable to identify. It is inappropriate, therefore, to use the term *UFO* to refer to the concept of an alien spacecraft or of an alien being.

This, at least, was the cause and effect relation that Pedley suggested with his report, making this episode famous on the UFO scene, with all the media attention that exploded in the press and in the media in general. Several sightings of these *nests* (as they were termed locally) were reported in Australia in those years, but one can say that this sign in particular symbolises them all.

Over time, George Pedley gave several interviews. The one he granted to UFO researcher Bill Chalker on 3 June 1981 is particularly interesting [3].

[3] www.project1947.com/forum/bctully.htm.

Here is an excerpt:

Bill Chalker: From what I have read you saw what you called a spaceship? You didn't really describe it in much detail.

George Pedley: Oh, I would never have said I saw a spaceship!

B.C.: That's what the papers were quoting you as saying.

G.P: Well, that's wrong for a start. I saw an object... something going up and that's it. Just what it was, I don't know.

B.C.: What did you really see?

G.P.: Well ah, I just saw this thing in the sky and it took off! It was about 25 feet when I saw it. 25 to 30 feet in the air, when I saw it.

B.C.: It was in the air when you saw it?

G.P.: Oh yes, I didn't see it in the lagoon as they say. That's wrong. The marks were in the lagoon... and it just took off from there (in the air). It went up another 25 feet and it just flew straight out.

B.C: So you saw it rise up from a position of about 20 feet when you first saw it.

G.P.: That's right.

B.C.: And the position where you first saw it, was that in the same spot where the nests were found?

G.P.: You mean the object?

B.C.: Yes, where you saw the object rise up, you say you saw it originally from 20 feet in the air, roughly about 20 feet in the air...

G.P.: Yeah...

B.C.: Where the nests were subsequently found, was that directly beneath that position or...

G.P.: That's correct.

B.C.: What sort of size would you have put on it?

G.P.: Size? Oh, the size was pretty right. I'd say 29-30 feet, something like that.

B.C.: Did you get the impression of an object, or was it sort of a solid-looking thing or gaseous...

G.P.: Well I thought it was a solid thing, at the time. I didn't see any portholes, or anything like that, antennas or anything like that. They could have been there, I'm not saying they weren't there.

B.C.: What sort of shape would you have put on it?

G.P.: Something similar to like 2 saucers, you know, face to face...

B.C.: What sort of colour?

G.P.: It seemed a silvery grey, a blue grey, like that.

G.P.: (with regard to the media assertions that he saw the object rise up out of the lagoon) I think there was a little bit of misunderstanding there. I would say it was their fault. Anyway, I'd never say that.

B.C.: So how long in sight was it for?

G.P.: We worked it out to say 30 seconds.

In UFO research, a *close encounter of the first kind* (CE1) is a UFO sighting in which the distance between the witness and the unidentified object is deemed less than 500 feet and a *close encounter of the second kind* (CE2) is a sighting that also includes associated traces on the ground [4].

[4] en.wikipedia.org/wiki/Close_encounter.

The photograph of the mark in Tully's lagoon published in the newspapers at the time.

We will return later to the CE2 of Tully's lagoon and we will understand its connection to crop circles; in any case, this excerpt is interesting because it has several aspects in common with those that will characterise the crop circle phenomenon from the early 1980s, when they began to appear:

– the witness is the spectator of a strange phenomenon

– something mysterious and unknown causes strange circular marks on the ground

– these circular marks are a tangible *sign* of the fact that an enigmatic phenomenon really occurred at that site

– there is a feeling of helplessness in being unable to explain an event

– there is sensationalism from the media, which report distorted information

The interview took place in June 1981, at a time when *something* had been creating, for about a year, mysterious circular marks in the crops of the English countryside and local newspapers were reporting the first articles on the subject. So let’s change time and place, moving from Australia in the 1960s to England in the 1980s.

Meaden versus Delgado: the battle of the first decade

> But Meaden gave as good as he got ‘They [Pat Delgado and Colin Andrews] believe these circles were caused by UFOs,’ he told *Leicester Mercury*. ‘That is nothing but pie in the sky which is wasting a lot of people’s time - although it looks good in newspapers. They have their own fantasy explanations for it and rule out all other possibilities. That is just not scientific.’
>
> Delgado told the *Winchester Extra* that ‘We are so disgusted that [Meaden] is so adamant that the rings are caused by whirlwinds that we don’t want anything to do with him.’
>
> – Jim Schnabel, *Round in Circles*, Prometheus Books, New York 1994, p. 67.

These two quotes describe and summarise very well the mood of the crop circle phenomenon towards the end of its first decade. But let’s proceed one step at a time and let’s try to define clearly what crop circles are and who Terence Meaden, Pat Delgado and Colin Andrews were.

The expression *crop circle* [5] originally referenced a circular region of vegetation (not necessarily wheat) in which visitors saw plants flattened to the ground, typically in a spiral direction.

> [5] From here onwards, crop circles will also be termed *circles* or *formations* for consistency.

The phenomenon began to be noticed in **1980** [6] in southern England and therefore was recorded by local newspapers and by other media starting from that time.

> [6] The very first article to include news of crop circles with an associated photograph was printed in the British newspaper *Wiltshire Times* on 15 August 1980. This date is important in understanding some developments that will be described later.

Over the years, the circles gradually increased in number and took on increasingly complex shapes. They were no longer just simple circles, but circles linked together by straight lines, rings and various extensions; triangles, rectangles and various geometric shapes, combined so as to create elaborate and spectacular *pictograms* or *agroglyphs*, as they were also termed through the years.

British physicist and meteorologist **Terence Meaden** was the first person to develop a systematic interest in the phenomenon starting from 1980 [7], while another Briton, **Pat Delgado** [8], entered the field the following year.

> [7] George Terence Meaden, *The circles effect and its mysteries*, Artetech Publishing Company, Bradford-on-Avon 1990, p. 9: *"Since the summer of 1980 the author has inquired into an intriguing scientific problem which has lately attracted the curiosity of the world."* In his following book (*Circles from the sky*) Meaden clarified that he had become interested in the phenomenon after reading the article in the *Wiltshire Times* of 15 August 1980 referenced earlier.
>
> [8] Pat Delgado & Colin Andrews, *Circular Evidence*, Bloomsbury Publishing Limited, London 1989: retired electrical and mechanical engineer, born in 1918 and deceased on 23 May 2009.

Meaden interpreted these circular signs in crops as the action of an atmospheric agent that was still unknown and fully undiscovered: a vortex that instead of rising, as normally occurs due to ascending currents in similar known phenomena (tornadoes, dust devils, etc.) acted in reverse, descending and therefore flattening the plants in a circular fashion. Over the years, Meaden added to his initial idea the fact that the vortex was composed of *plasma*, i.e., highly ionized gas. According to Meaden, this ***plasma vortex*** (also known as *Meaden vortex*) also explained the strange lights and sounds that witnesses were beginning to report. This hypothesis gradually lost backing towards the end of the 1980s, when increasingly complex formations began to appear. A natural phenomenon, such as the hypothetical plasma vortex, could never flatten plants in straight lines or form geometric shapes that were so complex as to require an *intelligence*, albeit an unknown one, to make them.

Delgado instead supported the theory that the circles were produced by an *unknown intelligence* using *unknown means*. He was joined in 1985 [9] by Colin Andrews [10].

> [9] www.colinandrews.net/Research-Dedication-PatDelgado.html: *Pat Delgado was one of the nicest and most intelligent people I have ever met. We first met in a crop circle, of course, during 1985 and we became the best of friends*.
>
> [10] Pat Delgado & Colin Andrews, *Circular Evidence*, Bloomsbury Publishing Limited, London 1989: Electrical Engineer at the Test Valley Borough Council.

The shared interest in the phenomenon brought Meaden and Delgado together. They even collaborated with each other for some time, but their different views on the causes of the phenomenon soon led them to clash ever more aggressively, both in private and in public.

Over time, therefore, two factions arose: the **Meadenites** and the **Delgadonians**. Demonstrating a combative, leader-like character, Colin Andrews established himself as a prominent participant in the public appearances and statements of the Delgadonian faction.

The clash between the parties was harsh, leading to the bitter words mentioned at the beginning of this section, in which they both state that they despise each other.

The ill feelings between the parties also led to a frantic rush to publish, since the one who published first his book on crop circles would probably receive greater public exposure of his ideas and therefore would gain supremacy over the rival.

Actually, Delgado and Andrews published *Circular Evidence* in 1989, just a few weeks *after* Meaden's *The Circles Effect and Its Mysteries*, but *Circular Evidence* soon became the best-selling and most famous book of the two, was translated in several languages and began the uncontested domination of the Delgadonian school of thought, the one that still survives today: an *unknown intelligence* which uses *unknown means* to create crop circles. Meaden's book

was not as fortunate. Success was not merely a matter of dates; content probably had to do with it.

In a few years, starting from 1980, the phenomenon had transformed from an embryonic and local state (confined to England) to something far more complex and had become international. All the newspapers were reporting about it. Television programmes that dealt with mysteries described it; all the media had a new *toy* to sell and the *mystery folk* had a new mystery to discuss and debate.

However, a mystery remains a mystery if, and only if, it doesn't have a final explanation. How could Meaden become popular, considering that he made from the outset the mistake of stating explicitly what he thought was the origin of the circles? Which subject would tease more the public opinion and the media: a *dumb* (and in any case presumed) weather phenomenon, or an unknown intelligence capable of shaping crops with unknown means?

The unknown is certainly more seductive, also because it is boundless and doesn't lend itself to fact-checking and refutations. To clarify the context, here is the vast mix of hypotheses reported by Delgado and Andrews in their second book [11], which was printed just a year after the first one and is a snapshot of the situation in the mid-1990s:

> [11] Pat Delgado & Colin Andrews, *Crop Circles – The Latest Evidence*, Bloomsbury Publishing Limited, London 1990.

– Effects caused by underground water

– Magnetic fields

– Cosmic energy

– Marks left by farming machines

– Plant viruses

– Insects

– Birds

– Extraterrestrial beings

– UFOs

– Chemical agents

– Earthquakes

– A particular type of electrical force

– Magic and witchcraft

– Facts to be linked to Biblical predictions

– Volcanic effects

– Seismic forces

– Seismic energy lines

– Ley lines [12]

> [12] Ley lines are alleged alignments of a certain number of places of geographical and historical interest. The expression was coined in 1921 by amateur archaeologist Alfred Watkins and then reused from 1969 onward by associating the initial idea with concepts related to hypothetical magical or spiritual powers of the lines. See *en.wikipedia.org/wiki/Ley_line*.

– Radio frequencies

– Effects caused by climate

– Air vortices and dust devils

– Effects caused by archaeological sites

– Earth satellites

– Gravity

– Effects of a religious origin

– Occult effects

– Effects of a spiritual origin

– Ultrasounds

– Planetary influences

– Debris from space

– Electromagnetism

All these hypotheses are merely listed, and indeed Delgado and Andrews do not favour explicitly, in their book, any of these in particular. However, through the years they wrote several articles in the British magazine *Flying Saucer Review* [13], showing that they were very much in favour of the hypothesis of a link between UFOs and crop circles.

[13] www.fsr.org.uk.

As further information useful for assessing these two *experts*, it is important to point out that both Pat Delgado and Colin Andrews never hid, from the very start (and were indeed very proud), that they used very bizarre diagnostic powers and *tools* typical of paranormal research in order to carry out their investigations on crop circles.

Evidence of this is Andrews' online autobiography [14], where even now he highlights his dowsing skills, while Delgado – in both his first book and his second book – wrote often of his ability to *tune into invisible vibrations and force fields* by using metal rods (modern

dowsing rods) to understand whether the circle being inspected was *genuine*** [15] or not, i.e., not man-made or vice versa.

[14] www.colinandrews.net/Biography.html.

[15] The concept of *genuineness* will be discussed in detail later.

These and many other aspects reveal rather clearly the shaky foundations on which the crop circle phenomenon was born:

– a self-proclaimed *expert* (Meaden) with a background as a meteorologist, initially enamoured and then obsessed and trapped by the idea that a new atmospheric phenomenon (to this day never seen and never documented) could create those strange marks in crops;

– two other self-proclaimed *experts* (Delgado and Andrews), who certified the *genuineness* of the formations that they found by using highly questionable methods (intuitions and personal feelings together with divining tests based on dowsing rods and other controversial instruments);

– two factions that fully disagreed on the methods and conclusions and continued to fight each other in the media.

Dowsing rods in action (Alton Barnes, Wiltshire, August 2004). Copyright: Andrea Feliziani.

A fine example of the battle that Meadenites and Delgadonians fought in those years was the case of the *Mowing Devil*.

A natural phenomenon, such as the one hypothesised by Meaden, should have affected also crops grown in past millennia and therefore there should be some trace of it in folklore. According to Delgado's version, instead, if the phenomenon was caused by an unknown intelligence that had begun acting around 1980 and then increased the complexity of the shapes, then this type of folklore trace could not and should not exist.

In those years of clashes between the two factions, the case of the *Mowing Devil* seemed to be the winning arrow in the Meadenite quiver. The history of crop circles, however, not only tells us that it did not work out that way. Indeed, the *Mowing Devil* became a prime asset of present-day Delgadonians, who now have no idea who Meaden and Delgado were, don't know that there used to be two ideological factions that fought in those early years of the phenomenon and, to keep the best for last, don't even know that they're Delgadonians.

The Devil mows oats, but he doesn’t flatten them

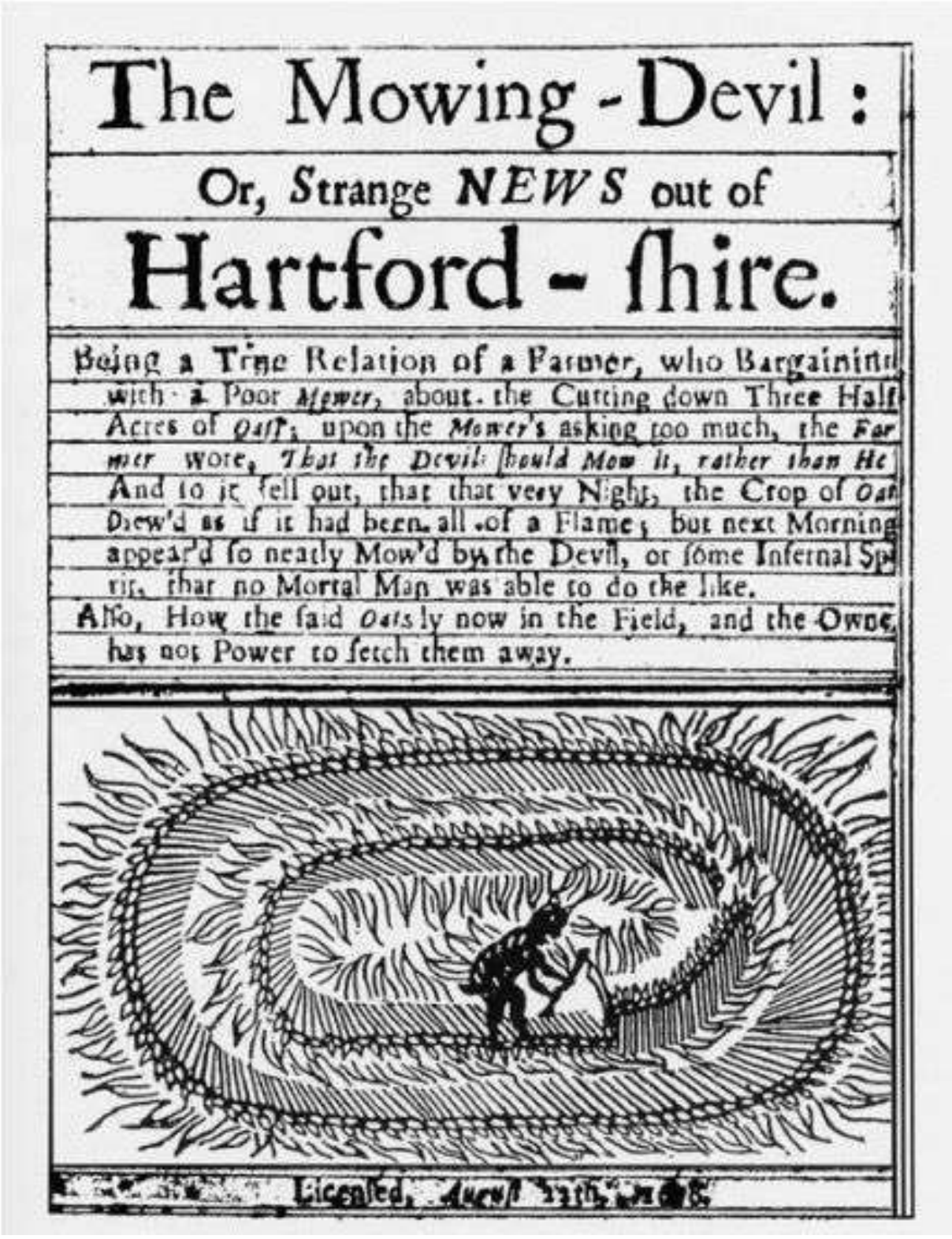
In August 1678, in the English county of Hertfordshire, a pamphlet reported the story of the *Mowing Devil*. It begins thus:

> THE MOWING-DEVIL: OR, STRANGE NEWS OUT OF HARTFORD-SHIRE
>
> Being a True Relation of a Farmer, who Bargaining with a Poor Mower, about the Cutting down Three Half Acres of Oats: upon the Mower’s asking too much, the Farmer swore That the Devil should Mow it rather than He. And so it fell out, that very Night, the Crop of Oat shew’d as if it had been all of a Flame: but next Morning appear’d so neatly mow’d by the Devil or some Infernal Spirit, that no Mortal Man was able to do the like.
>
> Also, How the said Oats ly now in the Field, and the Owner has not Power to fetch them away.
>
> Licensed, August 22, 1678

The pamphlet is indeed a period document; it isn’t a fake. There are no sources that refute its authenticity, and although only its introduction and the image of the devil are widespread on the Internet, the pamphlet actually consists of a very long text written in old English [16].

> [16] Terence Meaden (Edited by), *Circles From The Sky,* Souvenir Press, London 1991, p. 186. See Appendix A (*The Mowing Devil*) for the full transcript of the text.

Can a different interpretation be attempted if one reads it in full? What is a pamphlet in actual fact?



The Mowing-Devil:

Or, Strange *NEWS* out of

Hartford-ſhire.

Being a True Relation of a Farmer, who Bargaining with a Poor *Mower*, about the Cutting down Three Half Acres of *Oats*; upon the *Mower's* asking too much, the *Farmer* wore, *That the Devil should Mow it, rather than He*. And so it fell out, that that very Night, the Crop of *Oats* Mow'd as if it had been all of a Flame; but next Morning appear'd so neatly Mow'd by the Devil, or ſome Infernal Spirit, that no Mortal Man was able to do the like.

Alſo, How the ſaid *Oats* ly now in the Field, and the Owner has not Power to fetch them away.

Licenſed, *Auguſt* 13th, 1678.

The Mowing Devil of 1678.

Usually a *pamphlet* is, in English, a small book or booklet, i.e., a brief treatise on a specific subject. Today pamphlets exist not only in printed form but also on the Internet as *e-pamphlets*.

The term *pamphlet* as we know it today was used for the first time in the fourteenth century to distinguish a brief publication from a book, and its etymology has been traced back to the Latin erotic poem *Pamphilus, seu de Amore* (*Pamphilus, or About Love*), published between 1100 and 1200. The word *Pamphilus* then changed into *Pamphilet* and finally *pamphlet*. The main purpose was to disseminate information on specific subjects of a polemic and propagandistic kind. The popularity of pamphlets grew considerably after the invention of printing, and pamphlets began circulating in Europe especially in the sixteenth and seventeenth century in England, France and Germany, where they had more or less the same purpose as our current newspapers. In England, around the time of the Restoration in 1660, they had been largely replaced by daily newspapers and periodicals, but they became very important again as ***political weapons*** until the Glorious Revolution of 1688, the year of the historical *Declaration of Rights*.

If one reads the full text of the *Mowing Devil* and considers the historical background of the use of pamphlets, it is rather easy to notice that the text is quite loaded with terms that characterize two stereotypes of social classes: the **poor** and the **rich**.

The mower is always referenced as *poor*, while the farmer is always described as *rich*. In view of this, we can therefore read this pamphlet in a different light: a form of intimidating communication in which the poor mower and the rich farmer are antagonists.

The mention of the devil and his depiction, therefore, would be part of a sort of iconographic representation of an act of intimidation and vandalism that suggests the idea that the devil, i.e., the supernatural world, is on the side of the poor, or rather that the devil might harm the rich, proving that divine justice really does exist.

The intriguing story of the *Mowing Devil*, if read inaccurately as a mere report of events, has strong similarities with the crop circle and UFO phenomena: the flames described might be linked to the description of a UFO phenomenon that occurred in 1678 and the circles might be the description of the forming of a crop circle.

But does a literal translation of this pamphlet actually support the “UFO - crop circle” argument?

Let’s focus on this short excerpt from the text:

> ... that same night this poor Mower and Farmer parted, his Field of Oats was publickly beheld by several Passengers to be all of a Flame, and so continued for some space, to the great consternation of those that beheld it. ...

Or, from the end of the pamphlet:

> ... But not to keep the curious Reader any longer in suspense, the inquisitive Farmer no sooner arriv’d at the place where his Oats grew, but to his admiration he found the Crop was cut down ready to his hands; and as if the Devil had a mind to shew his dexterity in the art of Husbandry, and scorn’d to mow them after the usual manner, he cut them in round circles, and plac’t every straw with that exactness that it would have taken up above an Age for any Man to perform what he did that one night: And the man that ows them is as yet afraid to remove them. FINIS

If we accept a literal translation, we have to deduce therefore that many witnesses saw the field burning; they didn’t see, for example, *fire in the sky* as various sources inaccurately claim.

Moreover, the oats are *cut down*, i.e., severed, not flattened. *To cut* is an unambiguous verb; there are no other possible interpretations. Besides, the title of the pamphlet is *The Mowing Devil*, not *The Flattening Devil*, and no *real* crop circle, i.e., those documented starting from 1980, exhibits this feature. All the formations in fact show crops that are flattened to the ground, not cut.

Is the *Mowing Devil* the only attempt to find crop circles in ancient sources?

Robert Plot, the 1686 circles and other lesser sources

We mentioned that 1980 was the year when crop circles became news and we have also seen why, during the first decade of the phenomenon, it was so important for Meaden's followers to try to backdate its origin at all costs.

Can this really be done? It is still important for today's supporters of the mysterious origin of this phenomenon? The answer to this last question is positive, and the reason for this will become evident when we discuss the events regarding the British newspaper *Today* of September 1991. For the time being let's dwell on the additional sources, besides the *Mowing Devil* that we have already examined, that were used to try to find evidence of crop circles prior to 1980.

The treatise *The Natural History of Staffordshire*, written by **Robert Plot** in **1686**, is certainly a noteworthy source. If this source actually documented crop circle episodes, there would be little to argue about: the phenomenon would be at least a few hundred years old.

Robert Plot [17] was a British naturalist. He was born in 1640 and died in 1696. He was a chemistry professor at Oxford University and in 1683 became the first director of the Ashmolean Museum [18] in Oxford. Plot is known for his description and documentation of various unusual findings in England. For example, in his treatise *The Natural History of Oxfordshire* (1677) he described a fossil femur of a giant animal (we now know it was a *Megalosaurus* dinosaur) and in *The Natural History of Staffordshire* (1686) he described, among countless other items, the bizarre phenomenon of the double sunset that could be seen from the town of Leek on some days of the year, as well as strange circular formations in vegetation which today are

likened to *ante litteram* crop circles. With this premise, it is evident that we are dealing with solid documentation. Therefore, we need to get to the source [19] to better understand what the author is actually reporting.

> [17] en.wikipedia.org/wiki/Robert_Plot.
>
> [18] en.wikipedia.org/wiki/Ashmolean_Museum.
>
> [19] www.midlandshistoricaldata.org.

In the first chapter of the treatise, entitled *Of the Heavens and Air*, in item 17, Robert Plot introduces the subject as follows:

> 17. And here perchance by the way it maybe no great digression, to enquire into the nature and efficient cause of those **Rings** we find in the **grass**, which they commonly call **Fairy circles**: Whether they are caused by **Lightening**? or are indeed the Rendezvouzes of Witches, or the dancing places of those little pygmy Spirits they call Elves or Fairys?

Plot, in other words, is very clear in stating the subject matter of his analysis: **rings** in the **grass** commonly known as **fairy circles**.

He correctly describes these formations as *rings*, not as *circles* (which is their common name but actually describes the entire area inside a circumference), and he doesn't mention wheat, cereals or graminaceous plants. Instead he writes about rings in grass, circular bands of grass that is said to differ from the grass that is not affected by the phenomenon due to its different colour. In some cases it is lighter, in others it is darker.

Plot describes situations with rings of different sizes that expand over time. In his treatise he supports a hypothesis that today evokes a smile due to its naivety and simplistic approach: **lightning**. In his investigation, Plot describes that he performed excavations in the regions affected by the phenomenon and found less compact and dry soil, which contained light-coloured portions that had a foul, mouldy odour. He then links the various sizes of the rings to the hypothetical distance of the source of lightning from the ground (the

further the source, the larger the resulting ring) and justifies the whitish, fatty and sulphurous substance (the bad odour) as being caused by the addition of the lightning, which is capable of producing a different fertilization of the affected plants. This, therefore, would explain a different colouring.

Even if today we were unable to understand what Robert Plot was actually talking about in his writings, the first two elements that we pointed out (**rings** and **grass**) already show clearly that here, too, the will to adapt the reality of documentary facts to the wish to backdate the phenomenon at all costs has prevailed. However, fortunately today we are absolutely capable of understanding what Plot saw in 1686 and what he was able to document but could not understand correctly.

Although in Plot's days so-called *fairy rings* were known, it was believed at the time that these different colourings of the grass were caused by the gatherings of fairies, witches or mysterious creatures who, by dancing or walking in a merry-go-round fashion, induced that different colour in the grass. Today we know that the circular phenomenon that we still call **fairy rings** [20] is caused by the action of fungi, which start and spread more or less evenly from a central point and thus induce a different colouring in the grass by virtue of a particular process.

[20] en.wikipedia.org/wiki/Fairy_ring.

William Withering (1741-1799) was a British researcher who investigated the phenomenon of fairy rings and was the first to formalize in 1792 (thus over 100 years after Plot's writings) the formation mechanism of the phenomenon caused by more than 60 species of fungi, such as for example *Marasmius oreades*. The existence of three types of fairy ring was formalized later:

– Type 1: rings with sparse and damaged vegetation (more yellowish colour)

– Type 2: rings with greener, more luxuriant vegetation

–Type 3: rings with fungi

This explains all the episodes reported by Plot in his treatise, but if one looks at one of its drawings in particular it becomes evident that something doesn't add up. The true mystery of Plot's report is a ring with a square inside it [21]; clearly the square cannot be explained by fungi. What solution might this mystery have?

[21] www.francescograssi.com/ebook/ccsoi/v01/c02/021/.

Fairy rings on the grass near the Stonehenge complex (Hampshire, August 2003).

Curiously, Robert Plot solves this issue, too, with the lightning hypothesis, but actually the answer to this strange square in a circle once again arrives not from above but from below: another phenomenon that again affects plants and is known technically as ***cropmark*** [22].

[22] en.wikipedia.org/wiki/Cropmark.

When a crop grows on topsoil below which lie the remains of ancient buildings (walls, moats, et cetera) or uneven natural layers, this can affect the development of the plants. If a plant has less soil below it where it can expand its roots (for example when it grows above the remains of an ancient buried wall), these roots develop less and therefore the plant absorbs fewer nutrients, leading to a lower-than-normal height of the plant (**negative** cropmark). Vice versa, if for example the plant grows on the remains of an ancient moat, its roots have more topsoil into which they can burrow and therefore convey more nutrients; the plant grows healthier and taller (**positive** cropmark). These factors may also influence the colour of the plants in the same way.

Using aerial photographs of fields, today the cropmark method allows to discover previously unknown archaeological sites. This is indeed the case of the mysterious shape reported by Plot, which showed a square inside a ring.

Plot wrote [23] that these particular shapes had been shown to him in the field between the church of St. Giles, near Oxford (Oxon), and a garden known as Jericho.

> [23] Robert Plot, *The Natural History of Staffordshire*, Midlands Historical Data, page 15: *30. And not only in single, but sometimes in a double and treble Circle one within another, as was lately shewn me by my Worthy and Ingenious friend John Priaulx M. A. of University Colledge in the field between St. Giles's Church near Oxon and the garden called Jericho. They are rarely also seen of a quadrangular forme, encompassed with another larger of the Circular kind, as in Tab. 1 Fig. 7* [...].

Robert Plot and the cropmark (caused by an ancient moat shown in the cross-section) in the field near the church of St. Giles.

There are photographs [24] that show from above, in the same area where Plot moved, what he saw from the ground: **rings containing squares**. In the ground beneath Oxford, near the church of St. Giles, there are the remains of ancient moats, the presence of which was unwittingly documented by Plot in 1686. He could not imagine that he was actually walking on the *ghosts* of history.

[24] David R Wilson, *Ring ditches and fungus rings in the 17th century*, AARG News 13, September 1996, p. 46. See: aarg.univie.ac.at/aargnews/pdf/AARGnews13.PDF.

Another significant source, which is certainly less quoted that Plot, is a short report by **John Rand Capron** [25] included in the May-October 1880 edition of the magazine ***Nature*** [26]. Capron briefly writes about a curious phenomenon caused by the violent storms that had occurred in those days in Surrey, England, and reports that he saw in a field regions of vegetation that had been mowed down in a circular fashion.

[25] en.wikipedia.org/wiki/John_Rand_Capron.

[26] J. Rand Capron, *Storm Effects*, Nature 22 (July 29, 1880), pp. 290-291. See: www.francescograssi.com/ebook/ccsoi/v01/c02/026/.

Stranger still, these flattened circular regions still had, inside them, tufts of plants that were perfectly upright in the central region and Capron shows little doubt when he writes that this suggests to him the circular action of the wind. It is clearly a curious **natural lodging** caused by the bad weather that was affecting the area at the time. Rain, hail and wind flatten plants in absolutely random patterns and more rarely create flattened areas that have less random and relatively more geometrical shapes.

The last source that is usually mentioned in an attempt to backdate the crop circle phenomenon is **Agobard** [27], archbishop of Lyon, who was born in Spain in 779 and died in Lyon in 840. In his work entitled *Contra insulsam vulgi opinionem de grandine et tonitruis* [28], he reports and blasts the false belief of his contemporaries in so-called *Tempestarii* [29], people who were thought to possess the power to create hail, thunder and storms through magic and spells.

[27] en.wikipedia.org/wiki/Agobard.

[28] See Appendix B, *Agobard, archbishop of Lyon*.

[29] en.wikipedia.org/wiki/Tempestarii.

He finds it intolerable that such lies are told, first of all because it is unacceptable to claim that man can do what **only** God can do and secondly because those who dare make this claim are arguing essentially that God is unable to do what he actually does.

The link with circles is found, with some forcing, in the very short passage in which Agobard mentions an absurd belief of the time, according to which there was a region called *Magonia* from which came vessels *travelling among the clouds* and steered by *mariners of the air*. Moreover, according to this belief, these mariners would pay the *Tempestarii* to create on demand storms during which the crops, uprooted by hail and scattered by the storms, would be carried away towards *Magonia* with these ships.

If one chooses to read this passage as a testimony of the presence of **alien spaceships** (the vessels) guided by extraterrestrial beings in the past, it should be noted that the same Agobard fragment ends by mentioning an episode in which three men and a woman were chained up and risked being stoned to death because they were thought to have fallen from the ships and therefore were accused of being responsible for the theft of the crops. Clearly the points of contact between circles and these legends, which are very important in terms of folklore but not as documentary evidence, are extremely weak. Once again, the will to see at all costs only what one wants to see, without examining the facts objectively and rationally, prevails.

The case of Doug & Dave

The experts leave the scene

However, to understand why today's unwitting Delgadonians still find it so important to try to backdate the origin of the phenomenon, it is essential to go back to a crucial date: **9 September 1991.** Eleven years had passed since the phenomenon's inception and crop circles were being discussed all over the world. The first books had been published, especially Delgado and Andrew's bestseller, and all this had helped to establish, in the eyes and minds of public opinion, the existence of a new mystery to celebrate.

In this context, the British daily ***Today*** [30] published on that date an astonishing front page: **MEN WHO CONNED THE WORLD.** Two artists, Doug Bower (a painter born in Southampton on 25 June 1924) and Dave Chorley (a painter born on 26 August 1929 and deceased in 1996), had contacted the newspaper to reveal their story to the world: they were the ones who had created the first circles in corn, **around 1978**.

[30] No longer published. See: en.wikipedia.org/wiki/Today_(UK_newspaper).

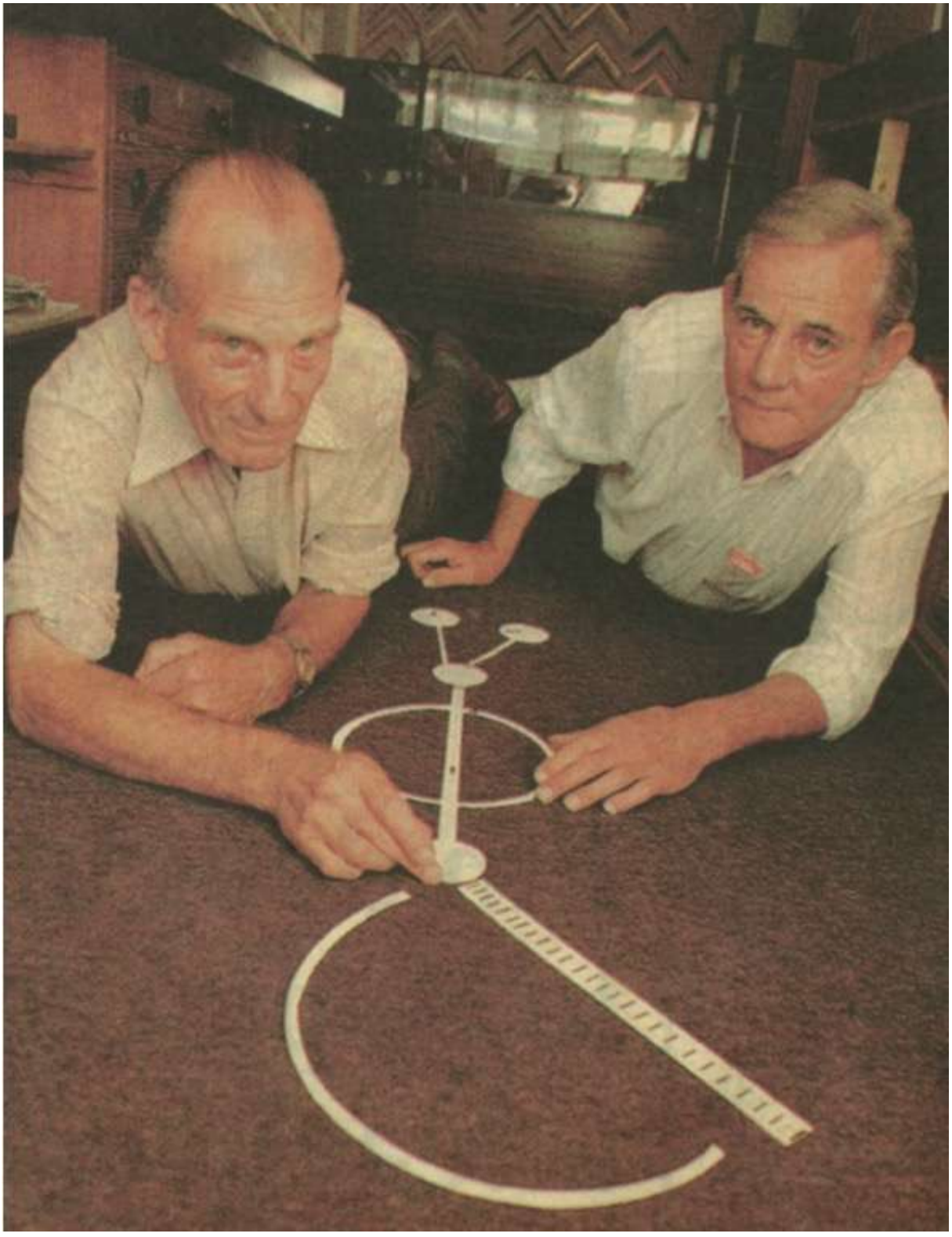
EXPOSED: Two artists admit they pulled off the great corn circles hoax for 13 years

MEN WHO CONNED THE WORLD

JOKER: Doug Bower

JOKER: Dave Chorley

The front page of Today.



Doug and Dave with the cardboard model of the circle they created for Today *(Image from* Today*).*

And so Doug and Dave revealed publicly that they were the authors of most of the circles that had appeared since the beginning and that they had orchestrated, up to that time, the main style of *circlemaking* (the art of making circles, a term which was coined subsequently) [31].

> [31] Some videos from that period are available at www.francescograssi.com/ebook/ccsoi/v01/c02/031/.

In the late Seventies they had begun this strange activity with the goal of fooling anyone who found the circular formation into believing that an alien spacecraft, a **UFO** in the improper meaning of the term, had landed there. We will delve into this aspect shortly, and later on in this book we will also delve into the techniques used by modern *circlemakers* (a term used to define anyone who makes crop circles, regardless of their quality), which in practice are still today the ones invented and used by Doug and Dave with a few *technological* variations, such as the use of measuring tapes instead of ropes of preset length.

Going back to the so-called *Today prank*, the published articles also showed that the newspaper's reporters, after spending a week with Doug and Dave to understand whether their claims were actually genuine, had asked them to make a custom formation so that they could then record the reaction of the greatest expert of the day, Pat Delgado, when he was called to the site of the circle.

Delgado was in fact invited by *Today* to inspect the new circle that had appeared mysteriously; after he had examined carefully the plants and the formation, he explained enthusiastically: ***"No human could have done this!"*** [32]

> [32] Quotes from *Today*, 9 September 1991: *"He stepped into the circle to make sure none of the stems were broken – which would be a tell-tale sign of a hoax* [...] *Mr. Delgado inspected the field after we hid the artists and said: "No human could have done this."*

And so the twist was revealed: the reporters then introduced to Delgado the two artists who had created the formation using mainly ropes to keep the preset distances and wood planks to flatten the crops.

Delgado's reaction was total defeat, and the original article includes several statements such as *"There's no doubt your test proves they are hoaxes. I thought it was a genuine circle"* or *"They [Doug and Dave] are to be admired in the way they have conducted their nocturnal escapades which made it look as though there was a real intelligence that we don't understand. From this simple prank has developed one of the world's most sensational unifying situations since Biblical days."* [33]

[33] *Ibid*.

Doug and Dave celebrate in the field.

Left to right, Dave, Doug and Pat Delgado (Credit: Today*).*

The news spread immediately all over the world and reverberated in all the media of the day. *Today* returned to the topic for a couple more days (10 and 11 September 1991). This twist, however, despite failing to quash the phenomenon, as we will see, certainly helped to raise the issue of the ***genuineness*** of formations.

It was known that human beings could create formations, but it wasn't clear how much circlemaking was popular and how an *expert*

eye could distinguish a man-made formation (i.e., a non-*genuine* one) from a *genuine* one (whatever that might mean).

Until then, people who learned about the new mystery had believed that the experts in the field (we have mentioned the main ones extensively) were capable of distinguishing the *genuine* phenomenon from something created on purpose by human beings. In other words, the idea that there really was something *genuine* that deserved to be studied, and that there were even experts who were doing so, had been instilled in the public opinion. However, as we have seen, Delgado and Andrew's approach to discriminating *good* formations was based substantially on personal sensations and divining tools such as the already-mentioned diviner's rods or other highly questionable methods. Meaden's approach was instead more *scientific,* but all things considered it was quite bizarre in terms of its foundations. He, too, presumed that there really was a *genuine* phenomenon and that he could tell apart the *genuine* from *human* art.

The *Today prank* instead showed that all this was merely wishful thinking and that one could not trust the experts, who actually could be so blatantly wrong, as had happened to Delgado.

Besides, even Meaden, defeated by the *Wessex Skeptics* [34], had suffered the same fate even before Delgado, although this had not received as much media attention.

> [34] See the video *Equinox: The Strange Case of Crop Circles 1991 - (5 of 6)* at 6:10 [www.youtube.com/watch?v=SIWsJ0pMM5U]: *"So you are telling me that the circle on Martin Pitts farm are hoaxed circles made by the Wessex Skeptics? I have to admit that some people at least that are scientifically trained are capable of perpetrating at least one hoax. That does not however negate all the positive evidence which has been gathered over the last ten years in favour of genuine circles."*

The methodological approach according to which there really is a *genuine* phenomenon and it is possible to discriminate *genuine* formations from non-*genuine* ones is still found, even today, in all

modern *experts* on the phenomenon and is the one that is constantly fostered by the media.

At the same time, it is also tragically true that nobody, so far, has provided a rigorous definition of what is meant by *genuine formation*.

Over time, several criteria have been invoked, such as *perfection, beauty, lack of signs of access* or *lack of damaged plants*, to recognize and identify a *genuine* formation. Moreover, from 1991 (the year of Doug and Dave) onwards, the concept of *anomaly* began to take shape and in the following years would play a key role, displacing the *rules of impossibility* (that humans could make the circles) that had been conjectured until then.

Anyway, we shall return in greater detail to the criteria of recognition and discrimination of *genuine* formations and to anomalies (which are also recognition criteria). For the time being, it is enough to know that the (self-proclaimed) main *experts* that had spawned the phenomenon in the media and had contributed to the birth of the myth of the existence of these alleged criteria for discrimination in practice faded away from the scene after the *Today prank.*

Meaden, overwhelmed by the events and by the claims of Doug and Dave, soon disappeared, and so did Delgado, who published a book the following year and then vanished permanently from the *crop circle scene*.

Of these three experts, only Colin Andrews continued to remain in the limelight and stay afloat in the sea of new experts who progressively crowded the scene and even today still has a rather significant role.

Credibility

But how credible are Doug and Dave? Can we trust two people who came out of nowhere and claimed to have begun this weird nocturnal activity in 1978 and sought to prove it?

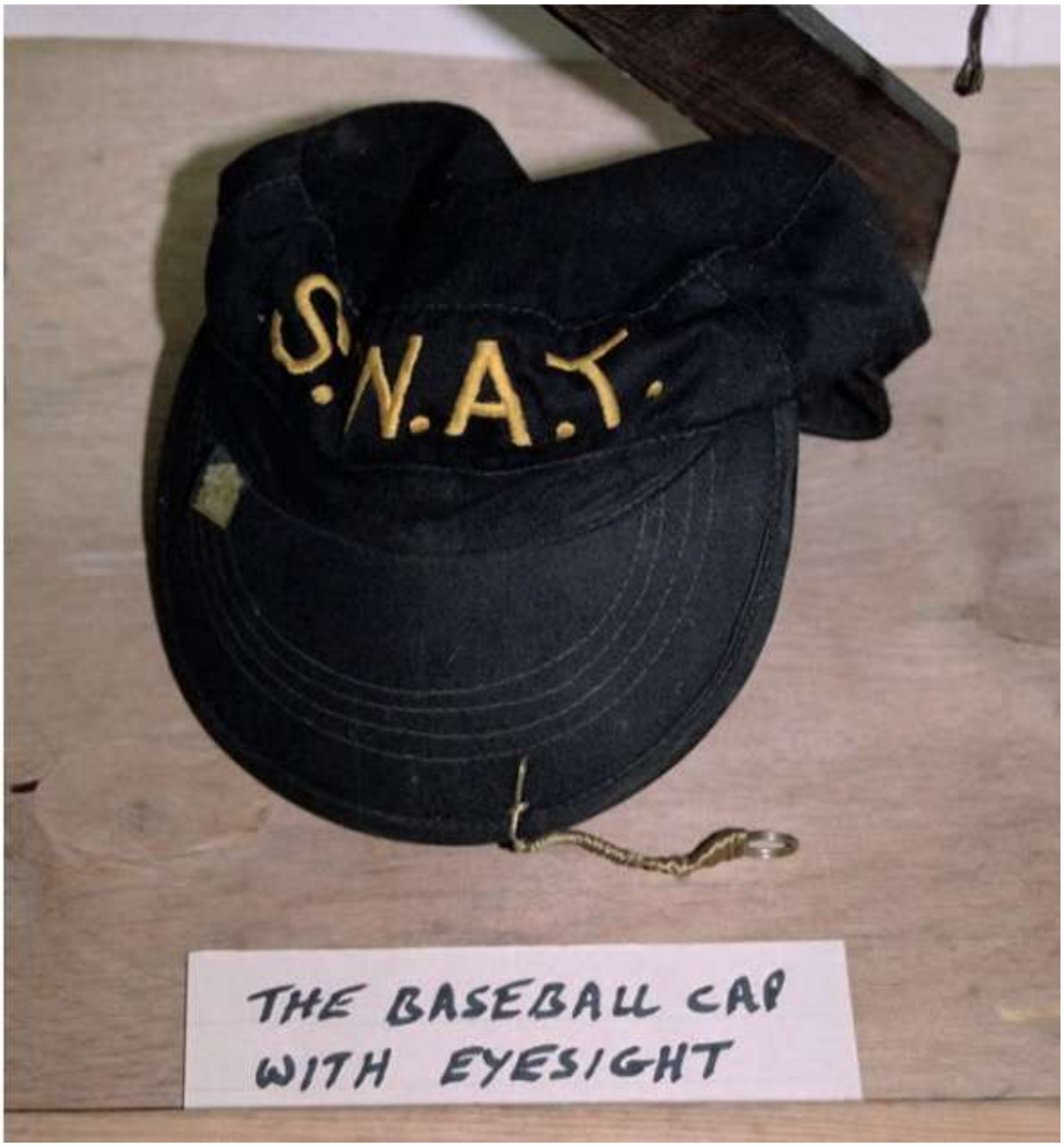
Before quoting some excerpts from a TV interview [35] given by Doug Bower in 2002, it is important to notice an element that is present in *Today*'s articles of 9 September 1991 but has not been pointed out much through the years, although it is easy to verify. The newspaper notes that the formation created for its reporters was based [36] on a drawing that the two artists had done several times during the 1991 season and had a ***ladder*** as a prominent feature. This information can be verified easily, and indeed Delgado's book *Crop Circles: Conclusive Evidence?*, published in 1992 by BCA (London) but dedicated to describing the 1991 formations, includes all of **four formations** that are similar to the one used in the *Today* prank. All had the recurring ladder theme and one was even embellished with two D's, the initials of Doug and Dave, as a signature.

> [35] A full transcript of the interview is in Appendix E (*Circlemakers: a documentary by Matthew Williams*).
>
> [36] As reported by *Today* on 9 September 1991: *"The design - based on a pattern they have used four or five times already this summer - was first: sketched out in detail on a piece of white cardboard and then cut into larger pieces of white card so that Dave could memorise Doug's design. [...] At 45 degrees from the end of the corridor was the "ladder" motif they have been using this year, capped by another huge semi-circle. The men cheekily signed off with two "Ds", the initials of their Christian names."*

Another element that is mentioned in *Today*'s pages and is very important to understand whether the two men were improvising and therefore were impostors was Doug's cap with the ***S.W.A.T.*** acronym.

Doug wears the cap with the loop. Credit: b1ackprojects.

Doug Bower had mounted a wire loop that hung below the cap's shade in order to use it as a sighting tool while aiming at a reference point at night, with the result of walking in a straight line simply by looking through the loop. Dave, behind him, could then follow his mate, flattening strips of plants or creating straight paths without using sophisticated technologies but using just his ingenuity. This trick of the trade is explained in detail in *Today*'s article and Doug demonstrated its use in a video at the time.



Doug's baseball cap. The loop attached to the peak is clearly visible. Credit: b1ackprojects.

These first elements, analysed coldly and rationally, certainly suggest that the two artists could not be impostors. They were absolutely knowledgeable of the issues involved and knew very well how to move through fields at night. Therefore, let us start from a few

verbatim excerpts from the TV interview to understand better the version of the facts from Doug and Dave's point of view and in Doug's own words.

From the very beginning of his media appearance, Doug Bower stated that he and his wife Ilene had lived in Australia from 1958 to 1966:

> Well, actually, we lived in Australia from 1958 to 1966, which is eight and a half years, and me always being interested in outer space and UFOs and things, I saw an article in the Australian newspaper one day, about some circles in... some reed beds or grass in Quee... Tully in Queensland, and after reading it of course I forgot all about it, but when I returned home in 1966 I met David Chorley.

Doug was in Australia when the Tully CE2 (*Close Encounter of the second kind*) mentioned at the beginning of this book occurred and he experienced first-hand the media frenzy that it created; he was very impressed, although **the matter remained latent in his mind** [37].

> [37] A *memetic* interpretation of the history of crop circles is proposed in the report presented by this author on 10 October 2009 at CICAP's XI National Meeting: francescograssi.blogspot.it/2009/10/cerchi-nel-grano-geni-memi-ufo-e-cerchi.html.

When he returned to England in 1966 he made friends with Dave Chorley:

> He was also an artist, so we had a common interest there, and for the next few years we used to go out on our Friday evenings to have a drink in the pub and talk about paintings. And one day when we were walking on... Cheesefoot Head near Winchester, one summer evening, in the midst of the cornfields, we sat down there and tried to get a bit of inspiration from UFOs and paintings, and I suddenly remembered this article that I read while [I was] in Australia and I said... told him about it and I said it would be quite a good [bit] of fun if we could devise some way of making a circular mark in the cornfields here and so it would arouse a bit of interest. People would think that a UFO had landed during the night when they discovered it the next morning. So after returning home to my workshop I sort of thought quite a bit the next day as to what we could use to make this circle, so we started off by using my big heavy security bar that was on my workshop door. And our first few circles were made on our hands and knees with this security bar.We were kneeling down side by side, but my goodness, it was certainly hard work.

The initial idea, therefore, is Doug's, and the goal is indeed to create something intentionally in the field so as to suggest the landing of an alien spacecraft. It is again Doug who tries to invent something to make the crop circle and the first attempts were carried out with the safety bar of the studio where Doug painted, but the method turned out to be very tiring and scarcely effective.

Doug and Dave then began to use ropes to maintain preset distances, tracing with their feet the construction lines of the graphic project they had planned beforehand. To flatten the chosen sectors, instead of using the heavy bar they began to use much lighter wood planks provided with a rope (this is the brilliant idea) so that they can be kept stably under the sole of the foot to then move forward and flatten the plants by stepping.

Initially their creations were unsuccessful and went unnoticed. Accordingly, Dave wanted to quit this activity, which was going nowhere, but one day the news began to spread:

> It was all a bit of fun, really, yes. And being circular, and UFOs were circular, we just wanted people to imagine just to... just to believe the next morning that "My God, something's landed here during the night!" And the fact that it was circular they immediately would think that it was a UFO, because flying saucers were circular, you see, it's no good doing a square or triangle or anything like that because they wouldn't cotton onto anything from outer space and, as I say, once the news broke it gave us quite a fillip, you see, and... to carry on, because Dave Chorley said to me one day, he says "I've had enough of this", he said, "I'm not going to keep on doing this," he said "every week". He says, "We're getting nowhere with this, we're getting no publicity." I said, "You just hang on a minute," I said, especially when the Punchbowl's ploughed, now when we get down in there... And of course lo and behold it was on the, the television news the next night and the news was rapidly spreading around that something was making these circular marks in the cornfields. And of course you know the story from then on, it just grew and grew. And of course the more publicity we got with the media and... newspapers and things, it egged us on even more.

Of the two factions involved, the Meadenites and the Delgadonians, Doug and Dave despised the former. They loved the idea that someone detected intelligence behind those patterns and didn't

appreciate at all that someone (Meaden) likened all their activity to the action of an alleged new natural phenomenon. In this context, they followed the conferences that the two factions organized, in order to understand how the communities of *believers* (people who believe that the crop circle phenomenon is genuine) responded to the appearance of the new formations. At a certain point, irritated by Meaden's will to ascribe anything to the action of the vortex, they began to create noncircular geometric shapes (corridors, triangles, etc.) specifically to go against Meaden's view of the matter:

> So the circles continued as circles for quite a while, but Dr. Terence Meaden, who was a very clever man as far as weather is concerned, he really got us, because he was saying it was wind vortices, you see, and that... We didn't like that, so we had to change from circles into something else...

At the beginning of the story, Doug and Dave were the only ones who knew the secret, and even Ilene, Doug's wife, was kept in the dark. This was the reason why they usually made circles mainly on Friday nights, but then one day Doug had to explain the truth to his wife:

> It was seven years before my wife really found out about this and... she came to me one day and she said, "This car needs servicing quite a lot," she says, "with the enormous amount of miles that you're doing" she said "I'd like to know where you are going in these evenings" and I said, "Well," I said, "we are journeying around the countryside quite a bit," and she wasn't very satisfied with this, so I had no alternative but to hand her the huge album of all the press cuttings, the publicity lovers that we were, and show her, and she said, "Well, this doesn't mean a thing to me really," she says, "I know all about the circles," she says, "but you're telling me that you and Dave are doing them?" She said, "There's only one way to prove it," she says, "is to take me out one night and tell me what you're going to do." Which we did, and then it was proved. But of course it was nice then, because once she knew, although we were only going out Fridays and perhaps other nights, but once she knew about this we could go every Mondays, Tuesdays, Thursdays, Fridays, Saturdays, and we were doing more, that's when the circles started to increase, because up until then we couldn't do many circles because we're only allowed out, so... so to speak, on Friday nights, and someone even made a remark, I don't know whether it was Pat Delgado or not, but he said, "It's very, very strange that these circles only seem to appear Saturday mornings," and of course that was quite true, you see, because it was Friday nights that we started doing the circles, but once our wives knew about it then the circles increased because we were out more nights then than the Friday night.

Another aspect that emerges from Doug's point of view is the anger caused by the fact that their creations were used to make money by taking advantage of the gullibility and naivety of the public, leaving them, the anonymous creators of these formations, only with the satisfaction and amusement at the commotion they caused:

> We were aware of it after a while... jewellery being made and tapestry wall hangings and all the rest of it, but as far as we were concerned we were just having a laugh from it, but there was no... there was no way really that we could make money out of it.
>
> [Ilene Bower, Doug's wife:] No, but we were angry that people were using it as a means of making money out of more gullible people, they were forming associations, they were doing, as you said, making... jewellery, posters, T-shirts, all this sort of thing. They were using your creations and people's gullibility to make money for themselves.
>
> Well, they still are, even today...
>
> [Ilene: Yes, I know!]

Doug's initial reaction to the emotions and behaviour of the people who visited the formations (so-called *croppies*) was amazement and amusement, but when he realised that things were getting out of hand he had to accept the facts:

> I had a good laugh at some of the things that they said. I mean, for instance if you see people laying on their backs in the circle joining hands and doing a dance around, to me that was incredibly funny when I first heard of it, but after a while I got a different way of thinking and I thought to myself, "Well, if this is what they want to make of it, it's entirely up to them." I, guy, can't understand why it's got so big, but I can see now that it's more or less uncontrollable, because these people are going to do exactly what they want, and if they get pleasure from it, OK.

Scrope's Wood, Wiltshire, July 2003. Copyright: Andrea Feliziani.

Doug stated several times, and was able to prove [38], that he loved the sounds of nature; that was why he often recorded at night the sounds made by deer, birds and animals in general.

> [38] A sample recording is available at www.bl.uk/listentonature/soundstax/birdwrens.html: Nightingale *Erithacus megarhynchos*, from *British Bird Sounds on CD*, Song, recorded by Douglas Bower, June 1973, Hampshire, England (mms://audio.bl.uk/media/wildlife/nightingale.wma).

The episode commented here by Doug shows once again the determination of believers to deny the facts. Doug went to one of the many events organised on the subject of crop circles and there he

heard a sound that had been recorded inside a formation and was being described as mysterious:

> I'm a wildlife sound recordist and have been for about 15 to 20 years now and... I'm out most nights recording the sounds of deer and mammals and birds and all this sort of thing and... when I went to the meeting at the Guildhall in Winchester one evening, which was the subject of crop circles, they brought up this business about the grasshopper warbler [39], the sound that they've heard up on... Cheesefoot Head near Winchester, and I knew immediately what this was because I'd already recorded this bird several years before and this bird also sings in the night. And when it came to question time after the meeting I walked up to the stage and I spoke to Busty Taylor, who happened to be there, and the other people as well and I said, "The noise that you heard that night was... a grasshopper warbler, because I'm a sound recordist and I knew what it was," and they did everything but almost throw me out of the Guildhall.
>
> [39] The grasshopper warbler is a bird of the order *Passeriformes* and of the family *Locustellidae* (en.wikipedia.org/wiki/Common_grasshopper_warbler).

Doug also got into the habit of reporting personally to Colin Andrews the occurrence of a new formation the day after it had been made, so that it would become known and popular immediately:

> Yes, when we used to go out to view what we've done the night before as I say, the only people that we knew were researching this was Pat Delgado, Colin Andrews, Busty Taylor who was flying over and Richard Andrews and... we used to get into conversation with these and I mean, they... they must know even to this day that we were frequenting up there and talking to them all the time and I always remember one Wednesday afternoon at Longstock. I took my wife up to Longstock to have a look at the circle that we'd made previous and... I met Colin Andrews up there and he said there was some connection between a bit of a rubbish dump there and the circle that was out in the field and he gave me his business card, and he said, "If you hear of any circles roundabout" he said "Perhaps you could let me know." I said, "Yes, I will, because I travel around quite a bit because I'm a wildlife sound recordist," and of course Dave and I used to do a circle one evening and then ring him up the next morning and said, "Oh, Colin, there's a circle and such and such," and he used to say, "Oh, thanks very much, thanks for the information," which made all the fun.

As mentioned, Doug acknowledged the fact that his circles had changed the life of many people who had made an act of faith in believing in a new *religion*, but what he never accepted was the role

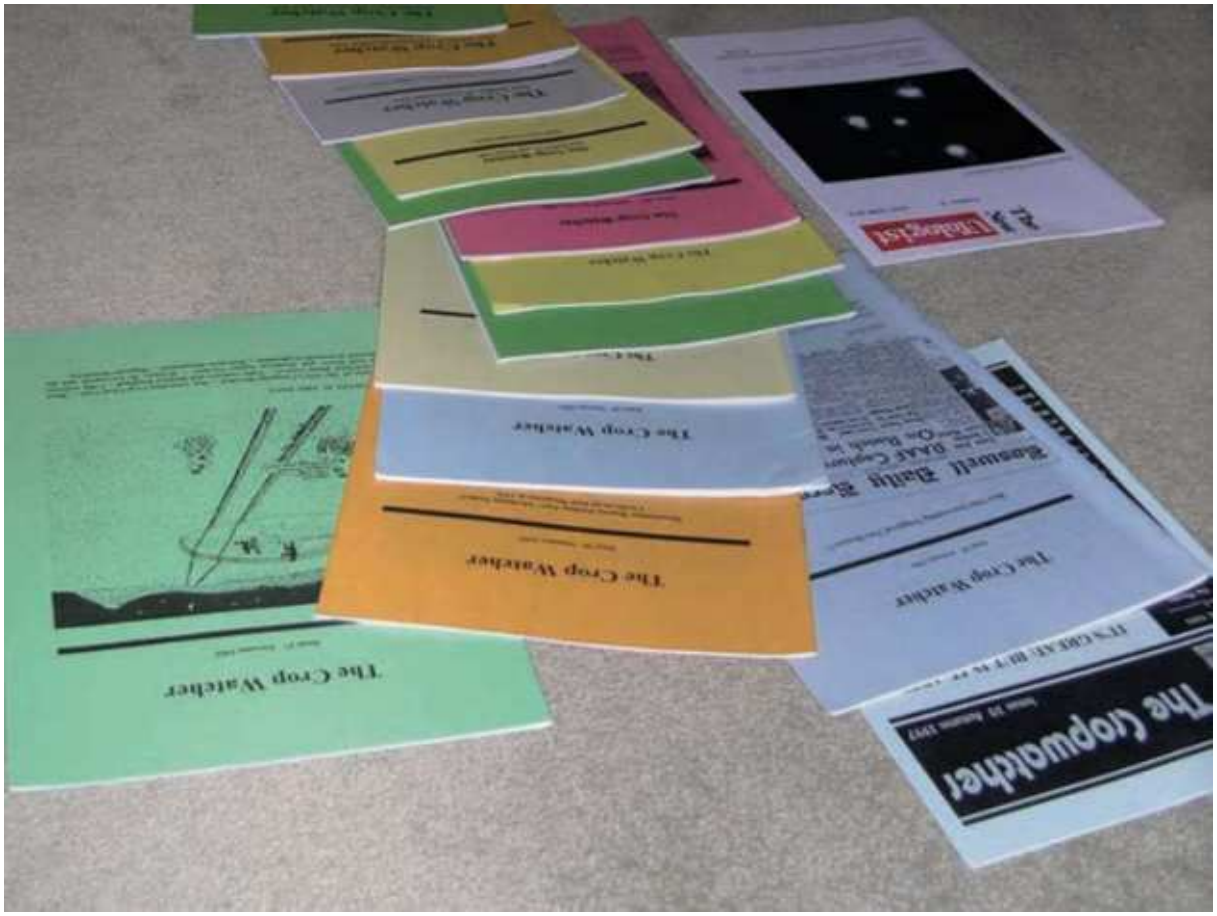
of *researchers* and *experts*, who built their fortune and public image by taking advantage of people's gullibility and by selling books, photographs and merchandise derived from the circles that Doug and Dave made:

> Well, looking back at it all now after all these years, I've come to the conclusion that it'll never end. I'm rather pleased that... thousands of people have found an interest and an enjoyment from it. I hope no one ever gets caught doing it; we has some narrow squeaks [escapes] but... I appreciate the fact that lots of people are more or less depending on this now for their interest, I suppose really it's a kind of religion but I've got nothing against these people and what they've made of it. The people that... the bit that gets me most of all I think is the so-called experts. What they've built on themselves up as, what they say it is, they seemed to know it all, the media goes to these people but the people that find some enjoyment and pleasure from it they're the people that I think are getting something from it and I hope it continues that way, but I don't think it'll never end, it'll never end, it'll go on forever.

Additional evidence

Another very precious source that allows to reconstruct key aspects that back up Doug and Dave's version is *The Crop Watcher,* a niche paper publication that was produced with amateur means by Paul Fuller. Today Fuller is not very well-known in the crop circle world, but at the time he spent many years on the subject, believed in it and fought for it strenuously. He had always been interested in UFO-related phenomena and entered the crop circle world in **1985**, joining Terence Meaden's research group the following year. He always trusted Meaden, perhaps more his hypothesis (the plasma vortex) than Meaden himself towards the end: essentially, he was and always had been a committed Meadenite.

It isn't easy to find paper copies of *The Crop Watcher*, but transcripts of a few issues are available on the Internet: every issue is a treasure trove of priceless information for anyone who wishes to study crop circles seriously.



The Crop Watcher. Copyright: Francesco Grassi.

Paul Fuller with the author (2004). Copyright: Francesco Grassi.

One very interesting excerpt is in issue 23 of the magazine, published in autumn 1994, three years from that fateful September of 1991 of the *Today prank*.

Fuller feels that the time has come to draw some conclusions and feels the burden of the events. He believes that it is time especially to admit his own shortcomings. He does so by writing a long essay, *Confession Time* (included in Appendix C), which summarises his personal experience, his false hopes and convictions, his mistakes, and also admits that although he had always known that circlemaking was real he had regrettably underestimated its importance and scope.

This is a touching essay, which reveals the inner conflict and heartbreak of a researcher who chases a dream, realises that something *monstrous* has become alive before his very eyes and feels even more guilty because he unwittingly contributed to its creation.

"So, now it is all over. I witnessed the birth of a social myth, a new religion, another extension to the overpowering UFO mythology," Fuller writes in that issue.

But let's go back to the question of the authenticity of Doug and Dave's claims: the important quote is in particular in issue 18 of *The Crop Watcher*, where Fuller reports extensively on a conference held on 28 July 1993 by Ken Brown [40] and Doug Bower at Nafferton Hall in Marlborough (England). The report is available in full in Appendix C of this book.

> [40] The British magazine *The Cereologist* debuted in summer 1990, announcing the establishment of the *Centre for Crop Circle Studies* (CCCS), with the goal of circulating information and studies concerning crop circles. The magazine's director, John Michell, was forced to change the name of the magazine to *The Cerealogist* after many readers insisted that the goddess of crops was *Ceres*, hence the word *cereal*. Ken Brown joined the CCCS towards the end of 1990 mainly to receive the magazine but also to conduct on-site investigations. Issue number 5 of the magazine published his article *Evidence of hoaxing at Cheesefoot Head*, in which he reported that in August 1991 he had examined three formations and found clear signs of their man-made nature.

Ken Brown was one of the many enthusiasts who followed the phenomenon: however, at a certain point, as he studied three formations that had appeared at Cheesefoot Head in 1991, he became aware of narrow bands [41] of trampled wheat below the main flattened region of the formations and realized that all the circles were man-made.

> [41] These are so-called *construction lines*, traced by circlemakers by flattening the crops with their feet, consequently producing bands approximately 30-40 centimetres wide. These lines or bands are then used to trace the remainder of the formation and remain physically below the other layers of crops that are flattened

subsequently, thus acting as evidence of a timeline of man-made construction. This concept will be discussed later in detail.

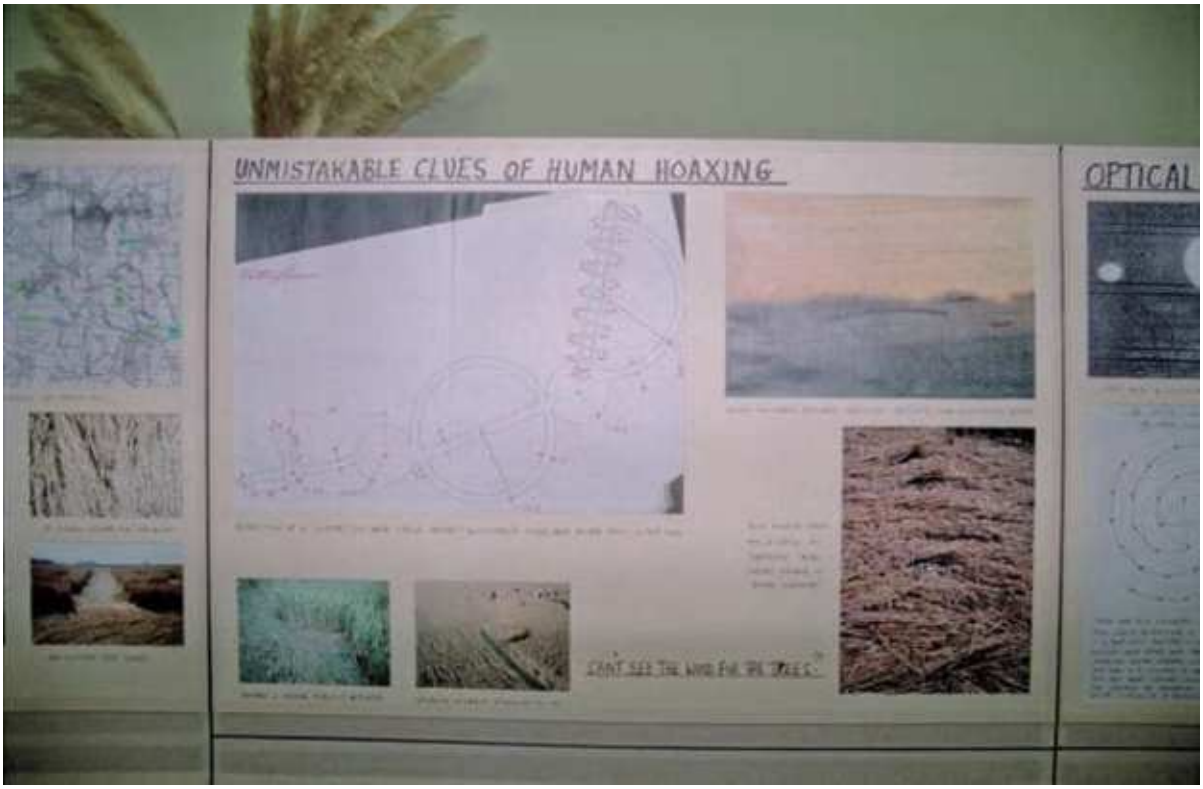
Ken Brown at Nafferton Hall in Marlborough. Credit: b1ackprojects.

In **January 1992**, Brown contacted Doug Bower to try to clarify some aspects of his claims and in the following **18 months** he repeatedly visited Doug in his painting studio in Southampton, often spending the entire day with him. It was only after this period of research, investigation and confrontation with the main source of information that he became finally convinced of the authenticity of Doug's statements. Therefore, he decided to become his spokesman [42] and he organised two public meetings to explain finally all the truth about the origins of the phenomenon. The first meeting took place at

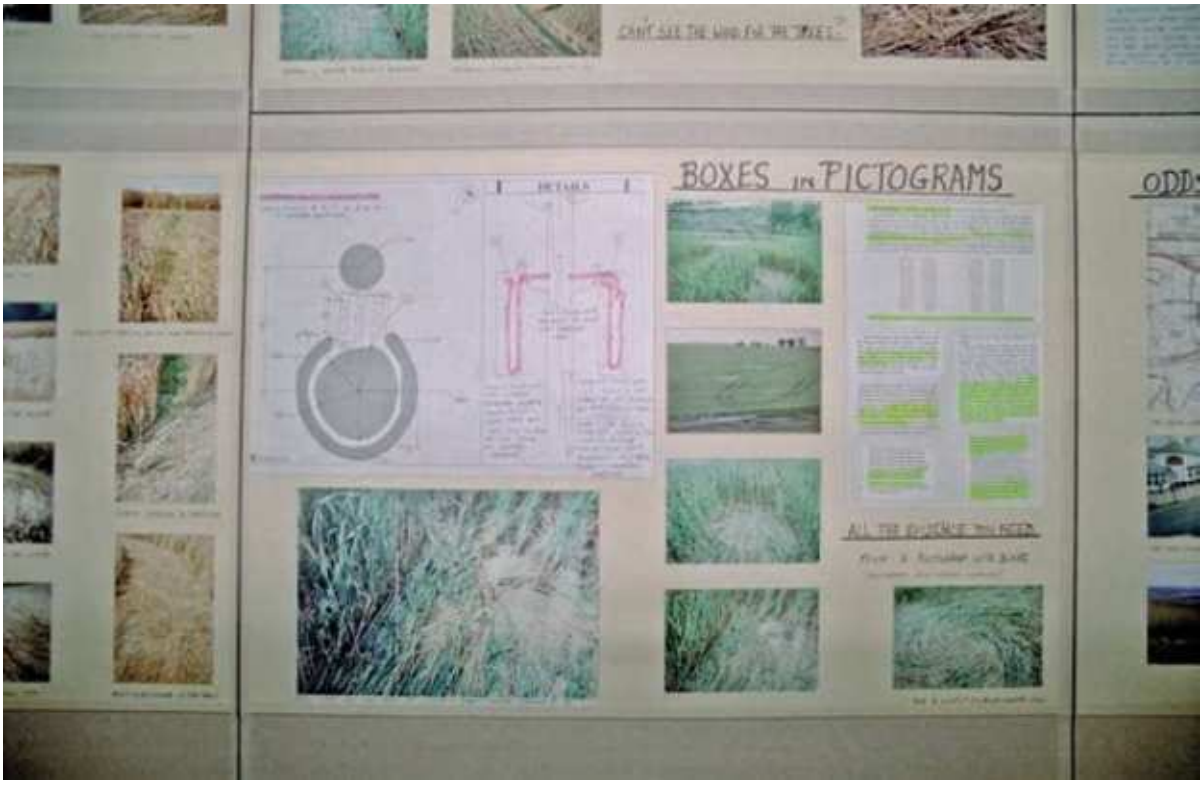
Nafferton Hall in Marlborough and is reported in detail by Paul Fuller in his magazine. A later meeting was organised in London.

> [42] During the month that followed the first meeting in Marlborough and specifically on 20 August 1993, Ken Brown sent letters to the various researchers of that time to provide them with additional clarifications regarding some pending questions about Doug and Dave and also on a personal level. See Appendix D.

Explanatory panels with newspaper articles and photographs on display at Nafferton Hall, Marlborough. The front page of Today *can be seen at the centre. Credit: b1ackprojects.*



More explanatory panels. Credit: b1ackprojects.



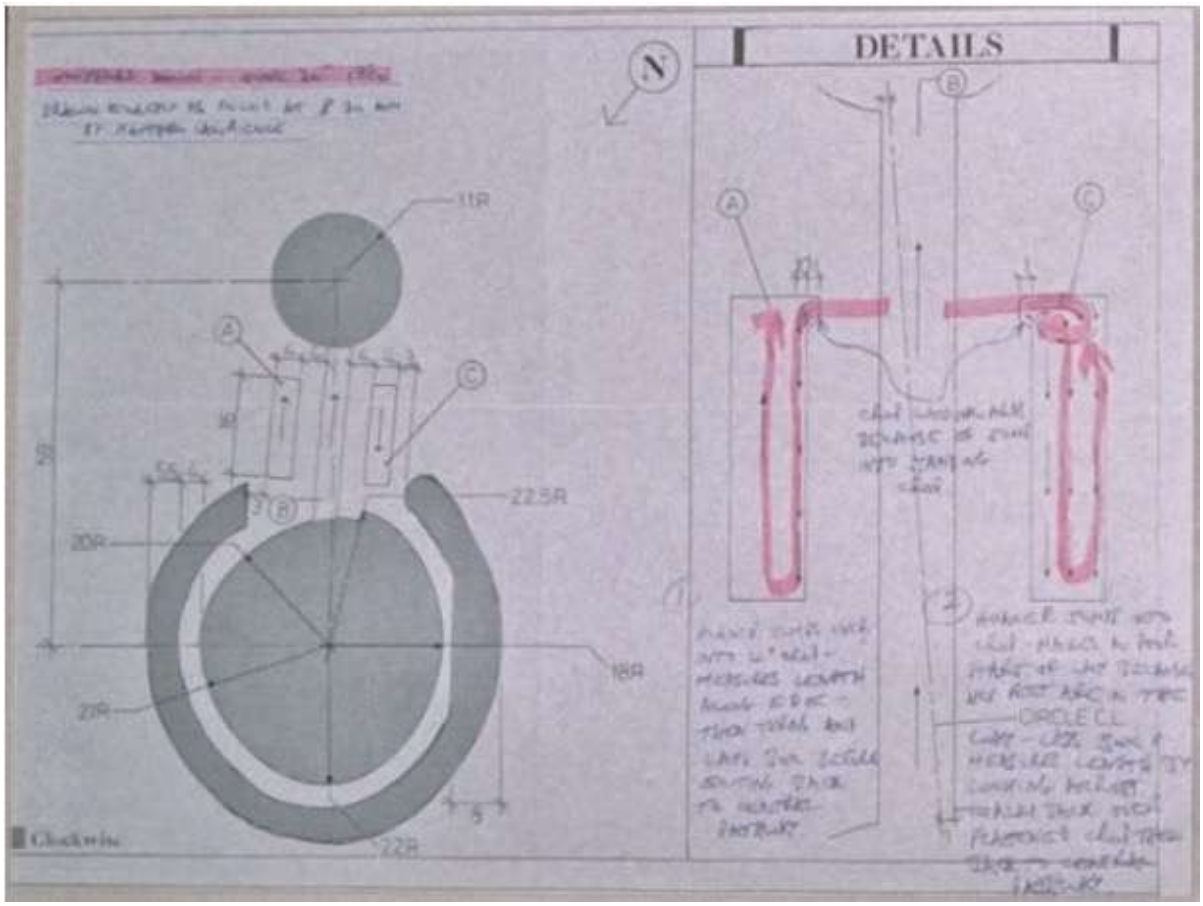
Further panels with photographic evidence. Credit: b1ackprojects.

Panels with the photographs taken by Doug Bower through the years, starting from 1980. Credit: b1ackprojects.

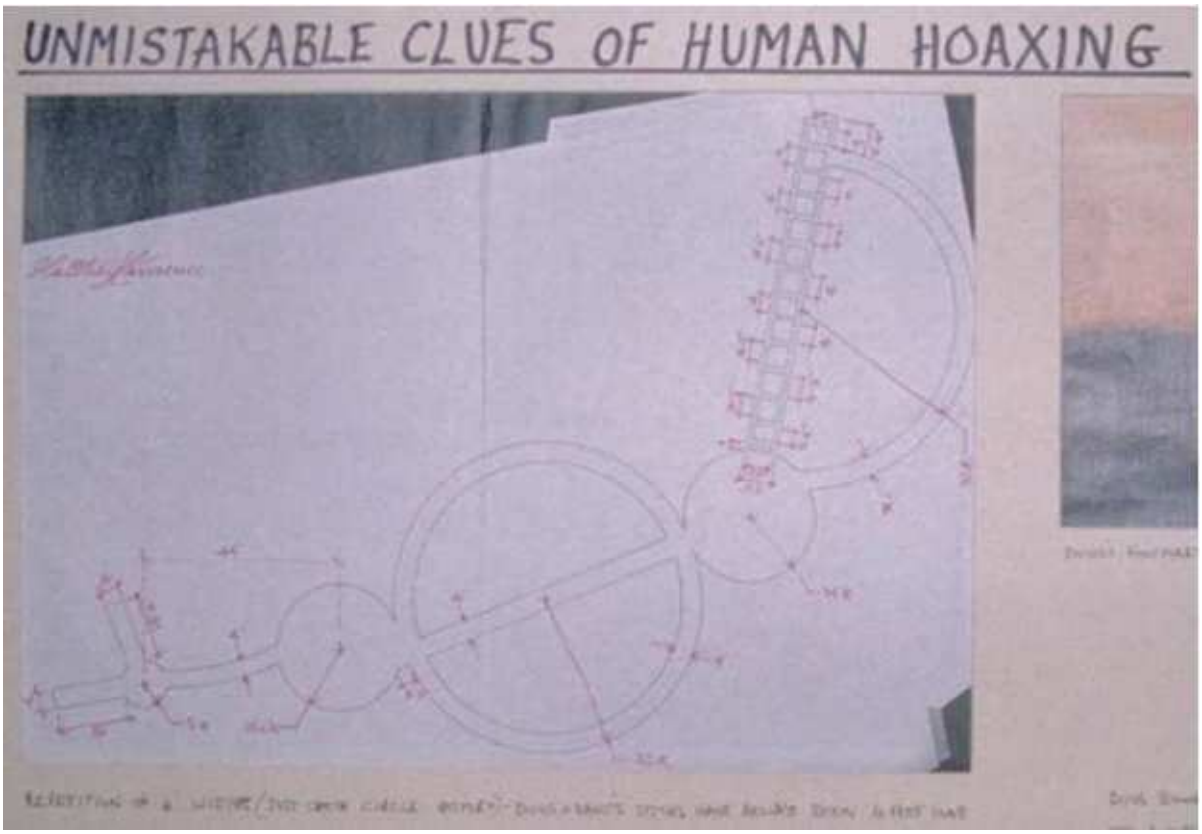
Doug Bower being interviewed at Nafferton Hall, Marlborough. Credit: b1ackprojects.

Doug Bower at Nafferton Hall, Marlborough. On the left on the table, circlemaking tools, photographs and explanatory pictures. Credit: b1ackprojects.

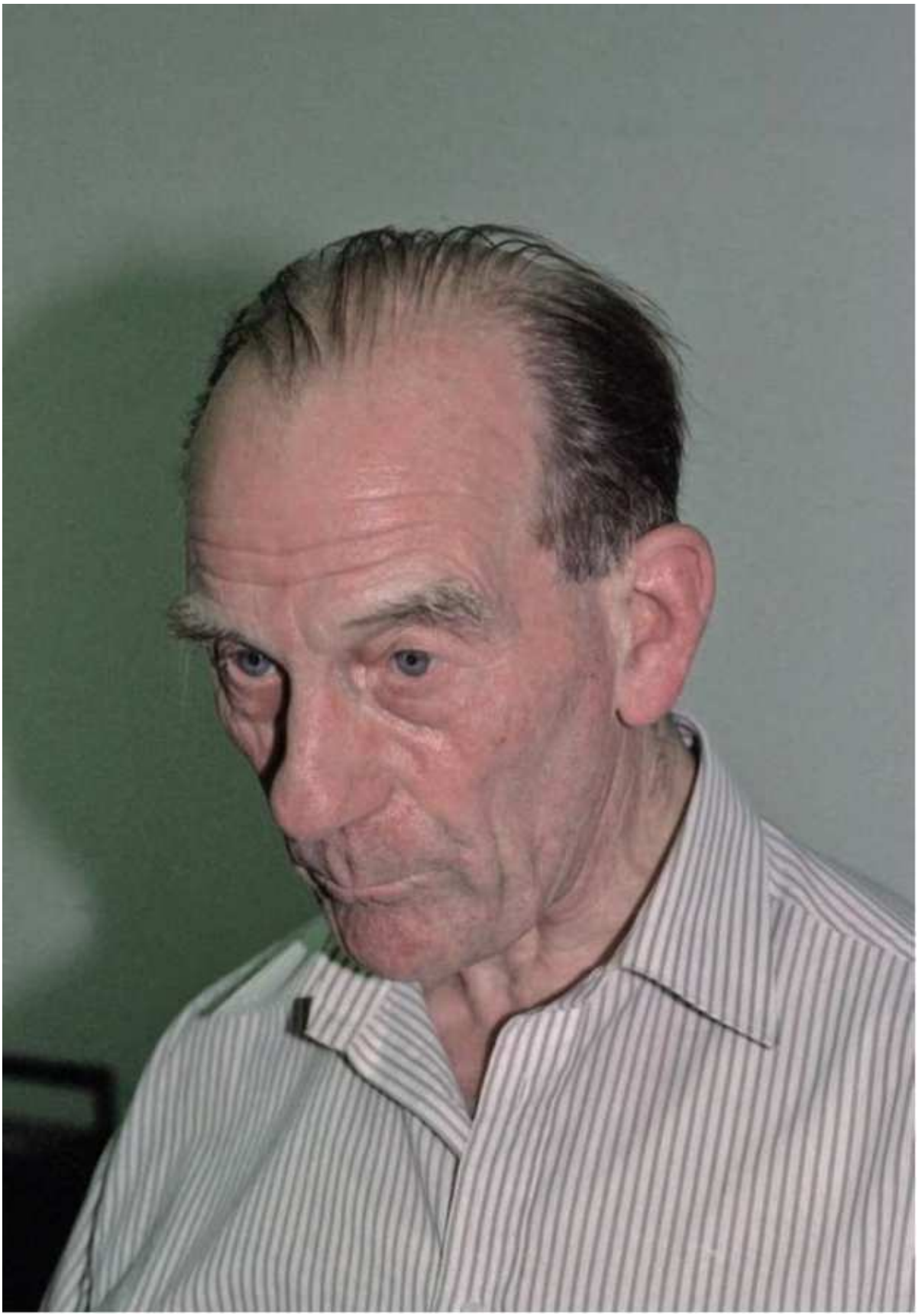
Detail of the boards and boots used by Doug and Dave. Credit: b1ackprojects.



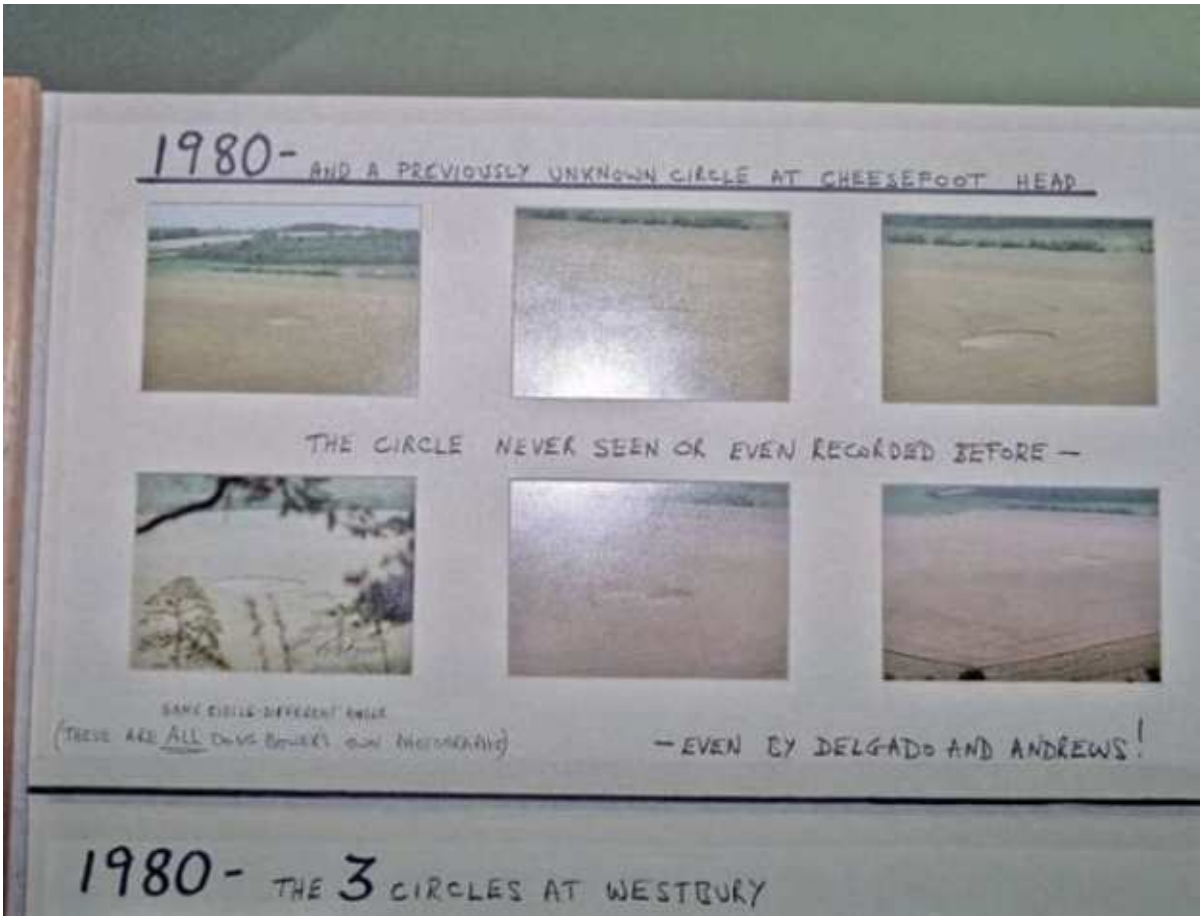
Detail of the panel showing how to make rectangular flattened areas. Credit: b1ackprojects.



Detail of the panel showing unequivocally the use of 4-foot (122-cm) boards. Exactly the length of the boards used by Doug and Dave. Credit: b1ackprojects.



A close-up of Doug Bower. Credit: b1ackprojects.


1980- AND A PREVIOUSLY UNKNOWN CIRCLE AT CHEESEFOOT HEAD
THE CIRCLE NEVER SEEN OR EVEN RECORDED BEFORE —
— EVEN BY DELGADO AND ANDREWS!
1980- THE 3 CIRCLES AT WESTBURY

Detail of the panel with the photographs of the 1980 circle at Cheesefoot Head, unknown even to Delgado and Andrews. Credit: b1ackprojects.

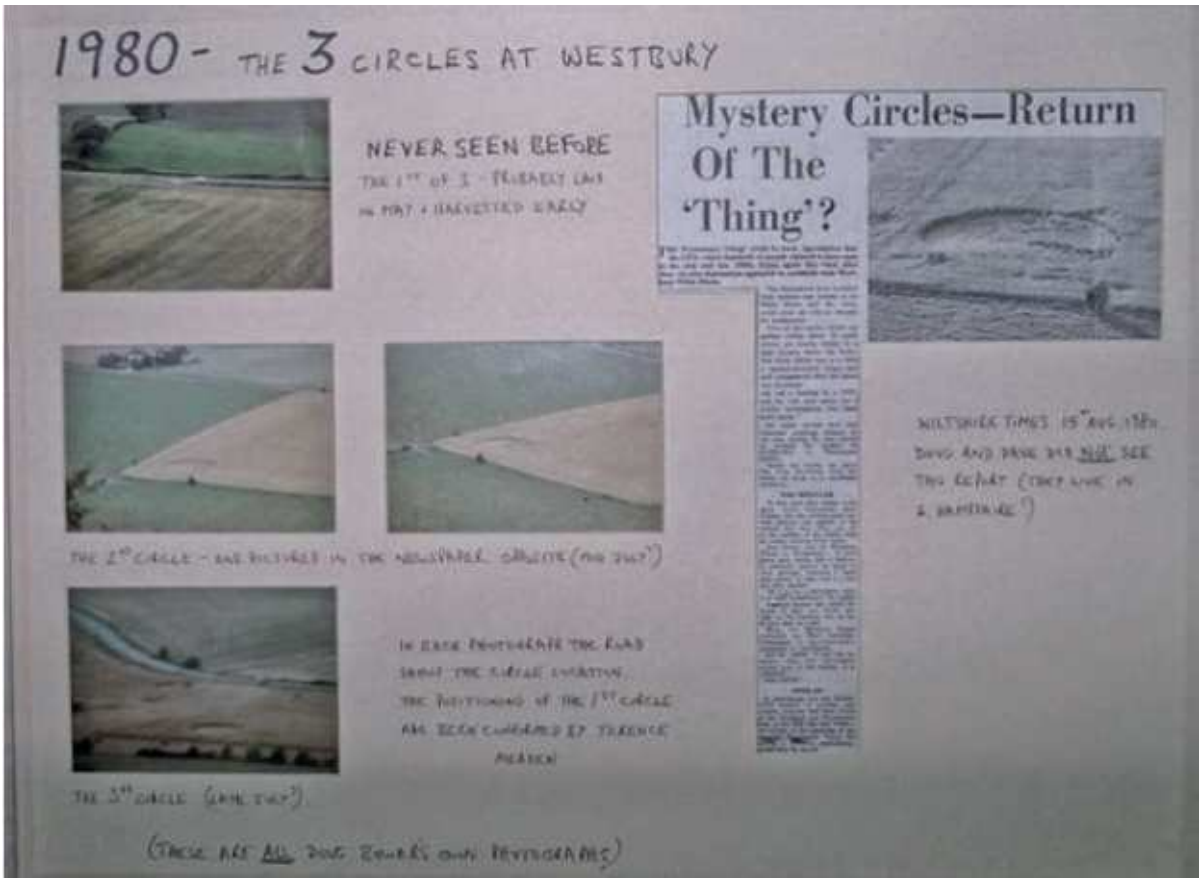
Reading the report of 28 July 1993 reveals that Doug Bower's photographs of the formations he made with Dave every year starting from 1980 were shown during the meeting. How could one ordinary person have all that material available, and how could he have been physically present to photograph all those circles?

Moreover, Doug had a photograph of a 1980 circle at Cheesefoot Head that was unknown to all the researchers and he also had photos of himself and Dave during the creation of several formations.

He even had four photographs, never seen before, of the three circles in Westbury in **1980**.

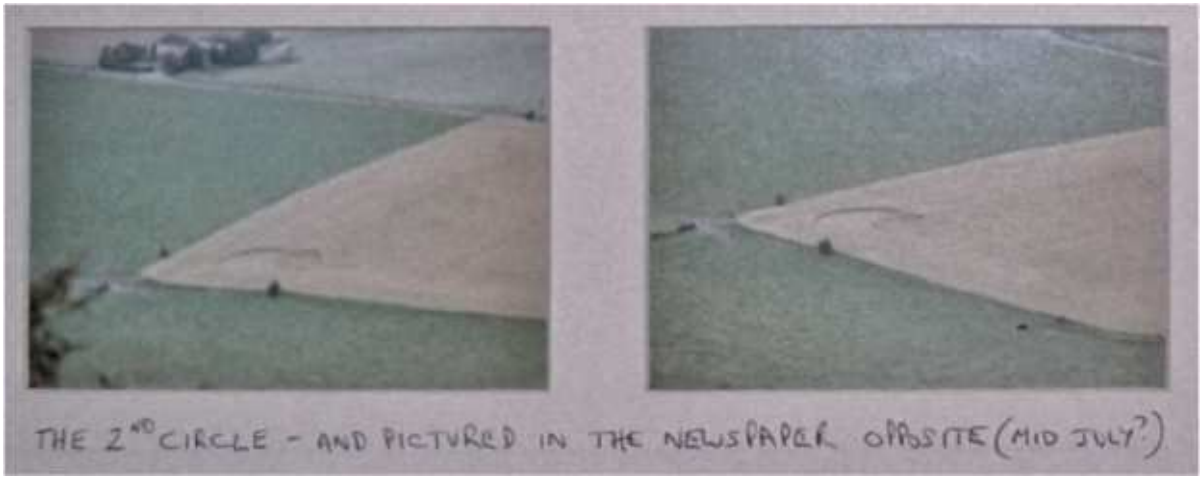
The first photograph showed a circle that probably had been created in May in a field that had already being mowed when the very first published article on crop circles appeared in the *Wiltshire Times* newspaper on **15 August 1980**: this was the same article that had prompted Meaden's interest in the phenomenon. Terence Meaden himself confirmed that this first photograph owned by Doug agreed perfectly with the position of the circle and with the data he had. The fourth photograph showed the third circle in Westbury, created probably towards the end of July, and the second and third photos showed the very circle [43] that had appeared in the *Wiltshire Times* but from two different angles.

> [43] This circle also appears on page 11 of Terence Meaden's book *Circles from the Sky* and is the picture taken from the *Wiltshire Times* of 15 August 1980. Doug Bower's photographs were taken from two different angles.


1980 - THE 3 CIRCLES AT WESTBURY
NEVER SEEN BEFORE
Mystery Circles—Return Of The 'Thing'?
(THESE ARE ALL DOUG BOWER'S OWN PHOTOGRAPHS)

Detail of the panel with the four photographs of the three circles of 1980. Credit: b1ackprojects.

Therefore, Doug was able to show two photographs (taken probably in July 1980 from two different angles with respect to the picture printed in the newspaper) of a circle that was presented in the press in August, when the circle phenomenon was not known and nobody yet knew about the existence of these mysterious marks, which had already been mowed.



A further detail of Doug Bower's two photographs showing from different angles the circle presented in the Wiltshire Times *on 15 August 1980. Credit: b1ackprojects.*

So Fuller quite rightly asks himself: *"How could Doug Bower have obtained these photographs unless he was the person who created them? How could he have known that he would have had to drive 60 miles up from Southampton after these circles appeared unless he made them?"*.

There's also another invaluable and unique source among crop circle publications that reports many behind-the-scenes details of the phenomenon in those crucial years from 1989 to 1993. Television

producer **John Macnish** began following and documenting the phenomenon with a believer's approach.

The photograph of the circle that appeared in the Wiltshire Times *on 15 August 1980. The tree at the bottom on the right is perfectly recognizable in Doug Bower's two photos taken from different angles.*

John Macnish videotapes an interview with Doug Bower at Nafferton Hall, Marlborough. Credit: b1ackprojects.

He soon realised what was actually going on and in addition to producing two important documentaries on the phenomenon (*Crop Circle Communiqué,* CircleVision, 1991; *Crop Circle Communiqué 2: Revelations*, CircleVision, 1991), in his book *Cropcircle Apocalypse* (CircleVision Publications, Shropshire, 1993) he told all of his story and his personal investigation into crop circles. Without telling the various researchers of that time and to test them, he followed and recorded on video Doug and Dave at night during the creation of their works in 1992, witnessing once again the consistency of their version of the events and the integrity of the entire reconstruction. It is particularly thanks to Macnish's work that today we can be certain of what really happened during those incredible years that saw the birth and media development of the phenomenon. It is useless to mention even just one passage from this book, since its entire text is

the **monument to the truthfulness** of the version of the events described by the two fathers of circlemaking.

All things considered, the consistency of Doug and Dave's story and the demonstration for *Today*, the failure of the experts' alleged ability to discriminate, the overwhelming photographic evidence and the other evidence presented and documented in the meeting of 28 July 1993 at Nafferton Hall in Marlborough and John Macnish's entire body of work help to make the version told by Doug and Dave more than solid.

Beyond any reasonable doubt, therefore, it is fair to deem that crop circles were born as a hoax created by Doug Bower, inspired by the 1966 episode of the Tully UFO in Australia, and then transformed into a great, incredibly complex **belief system** that was beyond the control of all the players involved: circlemakers, believers and the media.

INSIDE THE CIRCLE

What started as fun, pretty soon had become
Aliens from outer space
But they carried on and the T.V. at One
With big smiles on their face

Plenty were paid, experts were made
Fiction became a fact
Well I guess people they crave,
Answers from space
I can't argue with that

Criteria for *genuineness*

Aiming to discredit any possible human origin of the phenomenon, through the years the various experts and researchers, aided by the media, have helped to establish various myths in public opinion: *alleged* criteria meant to distinguish man-made formations from *genuine* ones.

Although *genuineness* was a chimerical concept from the outset and is still groundless today, hardcore supporters of the mysterious nature of the phenomenon constantly appeal to these legends as if they were *scientific truths*, and regrettably end up making the matter only murkier. Here are a few examples that may provide a clearer overview to readers.

Traces of passage

One of the first *rules of impossibility* to be mentioned still survives to a certain extent even today and can be summarised as follows:

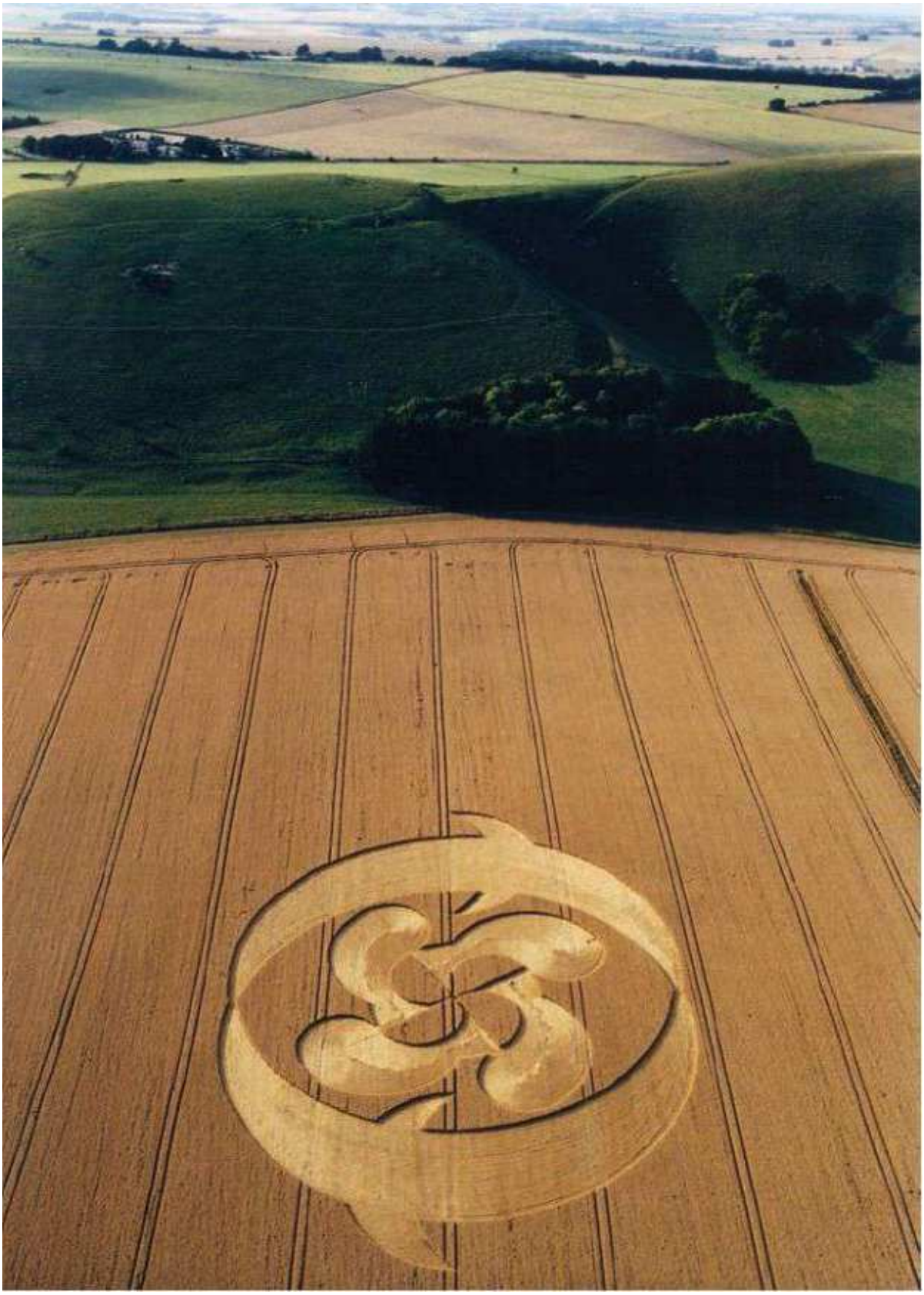
It is impossible for people to move around in a crop field without leaving traces of their passage.

It is taken for granted that if someone enters a field, then he or she will necessarily leave a mark in the crops. If there are no such marks, then it is claimed that the formation being considered cannot be man-made and something must have acted from above (some even surmise *energies* from underground). How could people otherwise enter the field from above? Using a helicopter, as in a military mission? Impossible.

The Golden Ball Hill formation (Wiltshire, England) of 26 July 2004 crosses three pairs of tramlines. So-called “croppies” about to enter the formation can be seen in the lower right part of the photograph. Copyright: Francesco Grassi.

To understand how it is instead quite possible to enter a crop field one should examine photographs of the formations. In almost every instance, and especially in cereal fields, there are lines that start from the edges of the crop and cross the plants in pairs and with a regular spacing.

An English tramline seen from the ground. Copyright: Francesco Grassi.



Golden Ball Hill, Wiltshire, 26 July 2004. Copyright: Andrea Feliziani.

Golden Ball Hill, Wiltshire, 26 July 2004. Copyright: Andrea Feliziani.

These lines consist of paths where there are no plants or where the plants have been flattened. They are used by farmers to cross the field with farm vehicles. During farming, the vehicles are used for various purposes, such as spraying pesticides, in order to obtain a better crop. These lines are known as *tramlines* and are the paths usually used by circlemakers to reach any part of the field with great ease, without leaving any mark of their passage.

Actually, with a little care it is possible to cross a field even without going through the tramlines. Doug and Dave showed *Today* [1] how

to do this and were also videotaped [2] during a demonstration: it is sufficient to take high steps and to avoid walking in a straight line, using one's hands or other means (for example the wood plank used to flatten crops) to straighten any plants bent by one's passage.

> [1] *"The pair walked down tyre tracks left by the farmer's tractor, not leaving a mark. They walked in high-stepping looping strides, swishing any corn they might have dislodged back up behind them with their hands."*
>
> [2] John Macnish, *Crop Circle Communiqué 2: Revelations*, CircleVision, 1991.

Rate of formation and subsequent touch-ups

Other myths meant to pad the list of alleged criteria for *genuineness* are linked to ***time****,* i.e., the swiftness with which the formation is created.

Usually everyone agrees that the answer to the typical question *"When are crop circles made?"* is that they are made at night, since they are discovered during daytime and eyewitnesses typically report that the formation wasn't there the day before. So **how long does it take to form a crop circle?**

Some say that circles are formed in a few minutes, therefore excluding any man-made origin. It would be humanly impossible to produce such large formations in such a short period of time. But is this true? In actual fact, there is no solid evidence backing up this claim and the overall situation is somewhat garbled. In some cases, people have reported that they witnessed circles appearing even during daytime. The most famous of these cases is the *Julia Set* of July 1996, near the well-known stone complex of Stonehenge.

VA 2768

1996: The Julia Set at Stonehenge. Our eyes see what our mind sometimes fails to remember. Illustration by Paolo Vallerga.

The tale is usually told as follows: Rod Taylor, a pilot, was flying with a passenger over Stonehenge in his ultralight aircraft at around 5:30 pm on 7 July 1996. Witnesses report that there was no formation in the field below them and the pilot landed at Thruxton airfield, which is a 15-minute drive away from Stonehenge. Taylor took off again and flew over the same field, where around 6:15 pm he saw the formation, which was also noticed from the ground by his former passenger, who was travelling in a car on the road alongside the field, also at 6:15 pm.

This is said to be adequate proof that the circle was created in daylight and in that short period of time. Actually, this is rather scant evidence, and we know well [3] the shortcomings of human capacity to witness and memorise correctly what one's eyes see but one's mind is often unable to put in focus [4].

[3] Do we really know? As a test, the reader is invited to answer this question: *How many times do the players in white pass the basketball to each other in the following video?* *www.youtube.com/watch?v=vJG698U2Mvo*.

[4] After taking on the previous challenge, the reader might want to try answering another similar question and watch another video: *How many times do the players in white pass the basketball to each other this time?* *www.youtube.com/watch?v=IGQmdoK_ZfY*.

On the other hand, there is substantial photographic evidence [5] of many formations that appeared and then grew in detail and size over the course of several nights (as many as four [6] consecutive nights).

[5] *francescograssi.blogspot.it/search/label/notte*.

[6] The Tan Hill formation of 2004 was created over the course of four consecutive nights, from 28 July to 31 July.

Tan Hill, Alton Barnes, Wiltshire, 30 July 2004 (intermediate stage). Copyright: Andrea Feliziani.

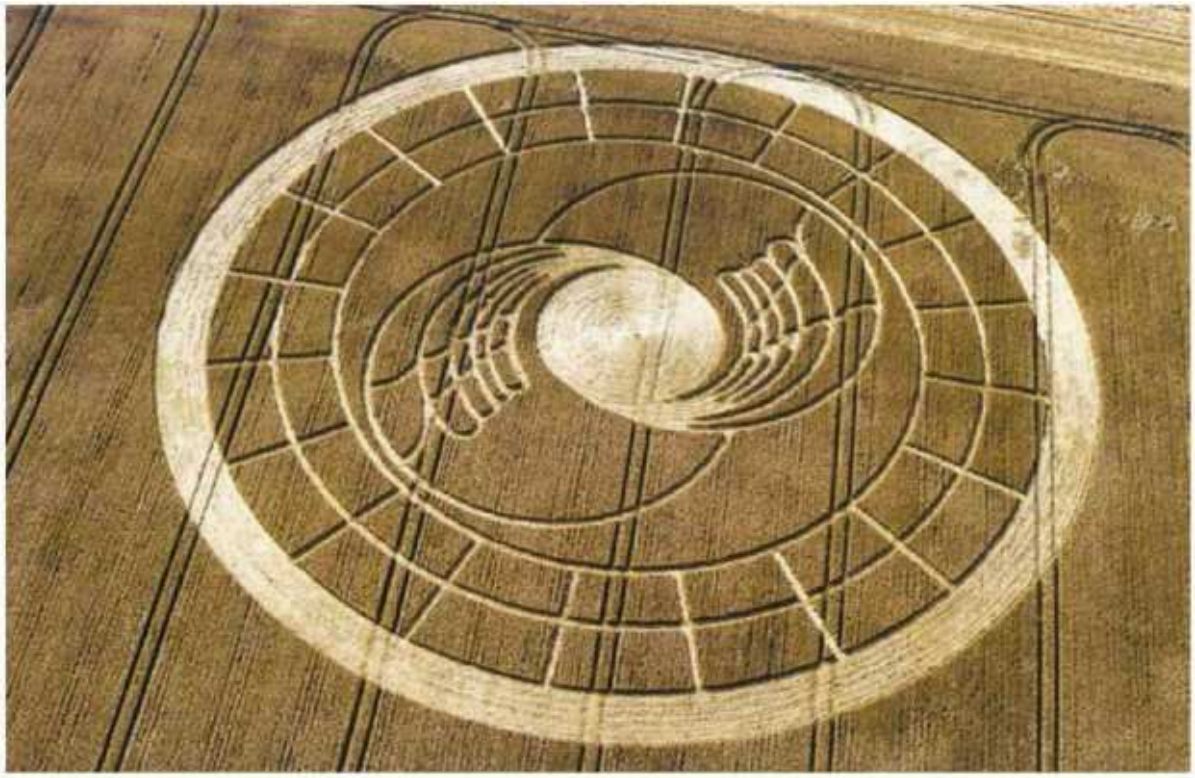
Tan Hill, Alton Barnes, Wiltshire, 31 July 2004 (final stage). Copyright: Andrea Feliziani.

Tan Hill, Alton Barnes, Wiltshire, 30 July 2004 (intermediate stage). Copyright: Andrea Feliziani.

Tan Hill, Alton Barnes, Wiltshire, 31 July 2004 (final stage). Copyright: Andrea Feliziani.

Silbury Hill, Avebury, Wiltshire, 2 August 2004 (preliminary stage). Copyright: Andrea Feliziani.

Silbury Hill, Avebury, Wiltshire, 3 August 2004 (final stage). Copyright: Andrea Feliziani.



Silbury Hill, Avebury, Wiltshire, 2 August 2004 (preliminary stage). Copyright: Andrea Feliziani.

Silbury Hill, Avebury, Wiltshire, 3 August 2004 (final stage). Copyright: Andrea Feliziani.

Paradoxically, even in these cases many believers find reasons to claim *genuineness* of these circles despite the obvious clues of their human origin, at least for formations for which there is incontrovertible photographic evidence of their process of creation and completion over several nights. All this clearly shows that confusion runs rampant and there is, therefore, no rule linked to the rate of formation of circles that allows to discriminate the human origin of the work.

The fact that there are reports of touch-ups and completions after the initial photographic records of the formation, therefore, tells us that circlemakers normally return to the field if they were unable to complete the formation properly; moreover, there may be formations created over the course of several nights for which there is no photographic evidence of their intermediate phases. Therefore, if a

formation is photographed only in its *final* stage, without photographic evidence one certainly cannot say that that specific formation was created in more than one stage or more than one night but – and this is crucial – one cannot rule this out categorically. Therefore, this should suggest a modicum of caution to those who blindly rely on the large size of a specific formation to rule out human intervention. Moreover, people who have no circlemaking experience certainly are poor judges of the time actually needed to create a formation. Doug Bower demonstrated at least once on video [7] that he was able to create, in just **15 minutes** and on his own, a remarkably large formation compared to those of the early years.

[7] *francescograssi.blogspot.it/2009/11/cerchi-nel-grano-un-uomo-armato-di-una.html*.

Perfection and traces of human construction

Touch-ups or later additions to a crop circle suggest that only those who know the original plan of the formation can know whether it is *perfect*, i.e., completed or not. This having been said, can one still speak generically of perfection [8] in crop circles?

[8] *francescograssi.blogspot.it/search/label/perfezione*.

As we will see, the answer is, once again, no. The concept of perfection is a criterion that is invoked often as an indicator of *genuineness*, but it has been used rather arbitrarily since the times of the first *experts*. Let us analyse a few examples to point out, once more, the strong biases [9] that have helped to create the crop circle belief system.

[9] *https://en.wikipedia.org/wiki/Cognitive_bias*.

One rather well-established myth is the perfection of the edge, i.e., the region of demarcation between the plants flattened to the ground

and that plants that instead remain upright. In a simple formation constituted by a single circle, for example, the edge would be the theoretical line of the circumference. The experts Delgado and Andrews, which we have already discussed extensively, report and describe in their first book a set of features that allegedly account for the *genuineness* of the inspected circles. It is interesting to read the description related to part of the edge of the 1986 formation at Cheesefoot Head.

> This bay [frayed edge] was found in the north side of the ring round a circle at the western edge of the Punch Bowl. It is typical of those sometimes found in the walls of circles and the outer walls of rings. So far there is no obvious explanation for them. They are usually about 2 metres long and penetrate into the standing crop about 0.5 metres. Possibly they are the result of 'gap seeking' (see page 144), and occurred when the ring or circle was being formed. While forming the periphery, the creative force finds a bare or thinly sown patch and temporarily flows outwards, but the basic arc of the force is recovered, so a bay is left behind. Alternatively, bays may occur where the creative force began to increase the diameter of the circle or ring, but after a short distance the enlarging was aborted.
>
> – Pat Delgado & Colin Andrews, *Circular Evidence*, Bloomsbury Publishing Limited, London 1989, p. 139, Plate 71.

This short excerpt is rich in useful clues for our analysis of the attitude of the experts towards what they examined. When researchers know in advance that they are inspecting a man-made formation, they tend to offer highly subjective assessments, biased by their advance knowledge. In the case we are considering here, the imperfection of the edge is not only considered a mark of *genuineness* but is indeed justified by means of a hypothetical creation process. All this is part of the so-called *Rosenthal effect*, which we will discuss in the final part of this treatise.

First of all, we find that what is described here is in every possible way an imperfection of the edge; therefore, at least in this 1986 formation, the imperfect edge is included in the celebration of the *genuineness* of that formation. Moreover, this "bay", no more than two metres (about seven feet) long, which tarnishes the perfection of

the edge by penetrating *“into the standing crop about 0.5 metres”*, is said to be a **typical feature** of circles and rings.

In other words, the two experts tell us that the edge of formations is normally not perfect and the source that states this fact quite candidly is authoritative. The book describes this situation as *gap seeking* and references a later page [10] that shows the same “bay” effect in another picture, which shows the plants flattened into the tramline instead of being aligned perfectly within the ring.

> [10] Pat Delgado & Colin Andrews, *Circular Evidence*, Bloomsbury Publishing Limited, London 1989, p. 144, Plate 83.

This situation, which Delgado and Andrews are unable to explain and ascribe to an unidentified energy, occurs when circlemakers flatten the plants directly with their plank without first tracing the circumference (the edge) with their feet. A little patience and this will become clear. If the reader is having difficulty in following these advance clues, he or she may come back to read these passages, since the final part of this book will provide more details on how circlemakers actually work.

Going back to the concept mentioned earlier regarding the edge and the plank, it is useful to bear in mind a crucial analogy: the **tip of the pencil** in geometric drawing on paper corresponds to the **foot of the circlemaker** during circle creation. Normally, all the construction lines of the drawing on paper are traced with one’s feet in the field. For example, to create a simple circle, i.e., to flatten the plants comprised within a circumference, first of all circlemakers trace the circumference with their feet by stepping sideways, flattening a strip of plants that is as wide as the sole of the shoes or boots that they are wearing. This strip, therefore, is usually 30 to 40 centimetres wide. Once the circumference line has been flattened, the step of flattening the internal area with the plank becomes much easier, since the plank doesn’t have to create the edge. Moreover, by working with one’s shoes and by stepping sideways, the edge is very sharp and precise.

A typical frayed edge that can occur when the edge is created by circlemakers directly with their plank instead of their feet. Copyright: Francesco Grassi.

However, when the plants are flattened by creating the edge directly with the plank (see also the case of small circles created by turning the plank, without using one's feet [11]), then the precision of the line traced with one's feet is lost and the frayed edges or "bays" described in such detail by Delgado and Andrews can occur.

> [11] Pat Delgado & Colin Andrews, *Circular Evidence*, Bloomsbury Publishing Limited, London 1989, p. 136.

Moreover, if the circumference is created by using one's feet and then a first pass of the plank is used to create a ring (as wide as the plank) inside the circumference, on one side there will be the precise edge created with one's feet, while on the other side (towards the inside of the circle) the plank itself creates the second edge of the ring. In such situations, the plants inside the circumference during flattening end up in the tramlines, producing the *gap seeking* effect described in Delgado and Andrews' book.

As further evidence of the fact that these two experts had no idea of what they were talking about, one can consider their description of the very precise edge of the smallest circle of the Bratton formation of July 1987.

> This particular circle had another larger one superimposed on it a few days later. This photo shows a peculiar thin strip of contra-rotation, which several circles in 1987 exhibited. The direction of the swirl in this circle floor is counter-clockwise, but notice the clockwise flattened stems at the edge – E-type lay, with a Y pattern. When examining these particular circles, it looks as though the floor was first swept around counter-clockwise, then the edge was finished off with a thin circular stroke in the opposite direction. This plate also demonstrates the precise, sharp edge found in many circles.
>
> – Pat Delgado & Colin Andrews, *Circular Evidence*, Bloomsbury Publishing Limited, London 1989, p. 139, plate 70.

What Delgado and Andrews described unwittingly is the situation that occurs when the circumference is traced in one direction (in this case clockwise) with one's feet and then the internal plants are all flattened in the opposite direction (in this case counterclockwise). What one sees at the end of this work is, of course, a narrow band (the one created with one's feet) along the edge that is flattened in one direction and all the remaining plants are flattened in the opposite direction. The very sharp outer edge described by the two researchers is caused indeed by tracing with one's feet, which are much more precise tools than the plank when it comes to line tracing.

Also on the subject of construction lines traced with one's feet, Delgado and Andrews unintentionally report the use of this technique when they describe a new mystery:

> Some circles have contained an additional enigma: a flattened 'path' underlying the main swirl, approximately 0.3 metres wide and radial. None of the stems are damaged, as is usual, but half of the path, from the centre, is facing outwards and the other half, from the outside, is facing inwards. The halves overlap in the middle of the path 1length.
>
> – Pat Delgado & Colin Andrews, *Circular Evidence*, Bloomsbury Publishing Limited, London 1989, p. 126.

This was the evidence that allowed Ken Brown, as mentioned, to realise that the circles were man-made. After tracing the construction lines with their feet, circlemakers then use these lines to set up the subsequent circles, and therefore the strip initially flattened with their feet ends up beneath the plants flattened later.

As we will see in the final part of this book, the famous formation at Milk Hill in 2001 was created by using this very technique: superimposing many circles so that their centres lie on the construction lines created previously.

In addition to the imperfect edges and all these other details that *experts* fails to realise are clues to the human origin of circles, the perfection of the state of the plants themselves is another myth that is not confirmed even by Delgado and Andrews' book. Consider, for example, the 1987 case at South Wonston, for which the authors even include two photographs [12] that show markings on the leaves that bear witness to the mechanical flattening of the plants. Delgado and Andrews' bestseller is full of details that are never pointed out adequately but, if they are read properly, provide further indicators that converge once again towards the only sensible solution to the mystery.

> [12] Pat Delgado & Colin Andrews, *Circular Evidence*, Bloomsbury Publishing Limited, London 1989, p. 51.

Complexity and size

Formations that are later revealed to be man-made are usually criticised by arguing that the circle is easy to make, since its complexity and size are *ridiculous* compared to *genuine* circles. This happened to me with formations that I made for popularisation purposes and to many other circlemakers who have demonstrated, through the years, that it is possible for human beings to create crop circles

When the experts and researchers find out that a specific formation is man-made, they eliminate it immediately from their interests and disqualify it because it is imperfect, because it contains damaged plants that bear witness to human clumsiness, and because their complexity and size cannot stand comparison to the formations that they believe to be *genuine*.

In a certain way, complexity and size are connected, since it is not possible to have very complex formations if they are not very large. The opposite, however, does not apply: it is possible to have very large yet very simple formations. Consider, for example, the creation of a simple circle with a 50-metre radius. A soccer field would fit inside it, yet the complexity of its creation would be truly minimal. This having been said, however, one should consider complexity and size with reference to the true history of this phenomenon and once again it is essential to reference the first book that established circles as a new phenomenon to be celebrated: Delgado and Andrews' *Circular Evidence* describes formations from 1978 to 1988, with diameters normally ranging between **10 and 15 metres.** A diameter of **20 metres** is rare; circles under 10 metres are also mentioned, and the most *colossal* size referenced by this book probably belongs to the 1987 Bratton formation, which was unique with its **30-metre** diameter.

The size of a generic formation can be estimated visually by counting the pairs of tramlines that it crosses. As a first approximation, an average distance of 15 metres can be assumed as a distance between pairs of tramlines. This is evidenced by the photographs shown in this book, in which the formations only intersect one or two tramline pairs.

As regards complexity, moreover, there is little to say. The phenomenon became known as *crop circle* because it consisted initially of just that: circles and nothing else. Only later did circles with concentric rings and other variations, all based on circular geometry, begin to appear.

These were the dimensions and complexities that shocked and attracted early researchers; these were the formations deemed impossible to make for humans; we must bear this in mind when we compare or judge any other formation, including those made presently.

As further reference for the reader, at the time of writing the largest ever formation [13] was created in 2009 in the Netherlands and is certainly man-made. It spans **530 by 450 metres. Remko Delfgaauw** [14], creator of the formation known as *Atlas*, made it with a team of about **60 people** in a single night. Paradoxically, many believers refused to accept that it had been actually made by human beings [15].

[13] *www.xld-sign.com/projecten/bekijk/Atlas*.

[14] Remko Delfgaauw is the head of the Dutch team building company XL D-Sign. See *www.xld-sign.com*.

[15] *francescograssi.blogspot.it/search/label/atlas%20project*.

The Atlas formation *created in 2009 in the Netherlands by Remko Delfgaauw with a team of about 60 people. Copyright: Remko Delfgaauw - xld-sign.com.*

Remko Delfgaauw (left) with two other circlemakers in the chest region of the "butterfly-man" in the Atlas *formation. Copyright: Remko Delfgaauw - xld-sign.com.*

The three circlemakers in the chest region of the “butterfly-man” inside the formation viewed in its entirety.
Copyright: Remko Delfgaauw - xld-sign.com.

It’s time for anomalies

After analysing some examples of alleged criteria for *genuineness*, let’s now clarify the concept of ***anomaly***, a term that encompasses additional *genuineness* criteria that are perhaps more sophisticated than the previous ones but are in fact, as we will see, just as baseless.

In crop circle jargon, an *anomaly* is usually any *unusual* event, phenomenon or feature that a researcher or visitor claims to have detected within the formation during or after inspection. The initial assumption is that since the anomaly cannot have been caused by human intervention and cannot be traced back to known causes, then it is a *sign*, an indicator of the *genuineness* of the formation.

A sort of official debut date for this concept in the history of crop circles can be identified. Pat Delgado’s 1992 book *Crop Circles: Conclusive Evidence?* (BCA, London 1992) includes a key passage that sets the tone for the new era of circles, i.e., the era of anomalies, in the section entitled *Further Crop Analysis*, with these introductory words (page 145):

> On 1 January 1991 I received a letter from Dr W.C. Levengood, whose laboratory is located near Detroit, Michigan, USA, explaining that he had just read our first co-authored book Circular Evidence. He wrote that there were many interesting questions raised in the book and those of most interest to him related directly to the morphological changes within plants growing in the circles and the subsequent plant development.

In January 1991 biophysicist W.C. Levengood [16] asked Delgado for samples of plants taken within the formations in order to perform laboratory analyses, with the hope of finding a clue or trace that might render the *genuineness* of *genuine* circles (pardon the wordplay) evident and *scientific*.

> [16] Around 1992, W.C. Levengood and John Burke, a New York businessman, and Nancy Talbott, a music producer with a background in research at the University of Maryland and at Harvard College, founded the BLT (Burke, Levengood, Talbott) research group on crop circles. See www.bltresearch.com/history.php.

It is certainly peculiar to consider that Delgado was not aware, at that time, that he was setting the foundations for the birth of the so-called *scientific* phase of the phenomenon. He also was unaware that by aiding Levengood's work he was in practice supporting the position of the despised Terence Meaden and his plasma vortices: a concept that Levengood had embraced, as we will see later.

On the subject of vortices, paradoxically Delgado had ended, just a few pages earlier (on page 136), the section entitled *Atmospheric Vortices* with these definitive words:

> This, then, is the official view of the Royal Meteorological Society. The foregoing statements have finally put an end to the claims of Dr Terence Meaden by stating in no uncertain terms that atmospheric vortices are not responsible for creating crop circles or pictograms. Let us have no more publication of unsubstantiated claims.

One might say that the pot is calling the kettle black, but Delgado published no further books after this one. As mentioned, Meaden quit, but other *experts* and *researchers*, over the years, regrettably promoted nonsense that was even more baseless than Meaden's claims.

Levengood didn't publish an actual book on the subject: he instead published his findings in two articles, which are the foundation of the phase of scientific anomalies of circles, which began in January **1991** and currently can be said to have ended in **June 2005** for the reasons we are about to give.

Levengood was, and still is, convinced that crop circles are the result of the action of alleged plasma vortices, the ones surmised by Meaden. Following up on the idea that this plasma, during crop circle creation, might emit electromagnetic waves and that these waves

might cause changes of some kind in the crop, in **1994** he published his results in the science journal ***Physiologia Plantarum*** *[17];* crop circles science thus appeared to have acquired some credibility and official standing.

[17] onlinelibrary.wiley.com/journal/10.1111/(ISSN)1399-3054.

In **1999** Levengood published a second article in the same journal together with his collaborator Nancy Talbott [18], supporting once again the idea that plasma vortices were the cause of crop circles.

[18] Nancy Talbott is currently the only remaining representative of the BLT group. John Burke, born on 13 November 1951, died on 26 February 2010; Levengood is no longer listed as a consultant. See www.bltresearch.com/proffcons.php.

In **2001** Dutch physicist **Eltjo Haselhoff** [19] was granted publication, again on *Physiologia Plantarum*, of an article in which he presented his opinions and comments on Levengood and Talbott's 1999 article.

[19] He appears to have abandoned the study of crop circles some time ago and now focusses mainly on composing music and on guitar recordings. See www.eltjohaselhoff.com.

Haselhoff also claimed that he had found strong clues that suggested and were in favour not of plasma vortices but of another agent involved in the creation of crop circles: the **BOL** or *Ball Of Light,* a particular type of *Unidentified Flying Object*, a UFO in the true sense of the expression. From now on this concept will be referenced by using the acronym *BOL*, which was formalised for the first time by British UFO researcher Hilary Evans in July 1982 in the UFO research magazine *The Probe Report*.

We will describe later the publication of a subsequent science article written by myself together with my colleagues **Claudio Cocheo** [20] and **Paolo Russo** [21] and published in **June 2005** in the *Journal of Scientific Exploration* (**JSE**) [22]. As we will see, this article presents criticism that demonstrates how the three articles referenced earlier

contain severe errors in methodology and that therefore the conclusions of the articles by Levengood, Levengood and Talbott, and finally Haselhoff have no scientific validity.

[20] Researcher of the *Centro di Ricerche Ambientali* (Environmental Research Centre) in Padua, a part of the Fondazione Salvatore Maugeri IRCCS. He deals with physics of the atmosphere, climatology, industrial and environmental hygiene. He has published over 40 articles in Italian and international science journals.

[21] Programmer and developer of system and realtime software.

[22] www.scientificexploration.org/journal/.

Plasma vortices and balls of light are still waiting for solid scientific evidence demonstrating not only that they exist, but also any cause and effect relationship (or at least a correlation of some kind) with crop circles.

In the next section we will delve instead into the remarkable anomaly of dead flies. In **one** formation in 1998, several dead flies were found on the plants that had remained upright within the formation itself. They appeared to be stuck by their proboscis and their wings were extended and elongated as if they had been struck by sudden death as they were about to take flight. Had they perhaps been irradiated as they were feeding by some mysterious ray that was creating a crop circle?

Although dead flies are considered a minor anomaly, we will see how much research, study and dedication were required to solve a mystery that was instead supported by several experts and promoted so superficially by the media.

The mystery of the dead flies

Birth of a legend

When discussing crop circles or watching television programmes on the topic, this mystery is often mentioned. It began spreading in July 1998 in the community of crop circle supporters, which by that time was worldwide.

Dutch researcher Janet Ossebaard reported personally in the main source [23] that on 17 July 1998 she had found several dead flies attached to ears of wheat in a formation in the British town of Cherhill, in Wiltshire. According to her report, the proboscis of the insects was firmly attached to the ears and the legs and wings were extended as if the flies were about to take flight or as if they had died during a final spasm. Despite being apparently perfectly preserved, most of the flies were unquestionably dead, while others were attached to the ears of wheat just like the dead ones but were alive and were able to recover and fly away after being detached from the plants. Ossebaard reported also that some flies looked as if they had exploded: legs and body parts were scattered in the ears of wheat.

[23] *www.francescograssi.com/ebook/ccsoi/v01/c03/023/*.

The researcher collected some of the dead insects and, as the source reports, sent them both to W.C. Levengood and to a British laboratory. Other sources report that the person in charge of the British laboratory suspected initially that the death of the insects was caused by the effects of the ***Entomophthora muscae*** fungus, but often add, without any justification, words such as *"after more in-depth studies this cause was ruled out. A phenomenon of this kind*

had never been seen before and no satisfactory solution could be formulated."

Dead flies photographed in the formation at Cherhill, Wiltshire, in July 1998 by Janet Ossebaard. Copyright: Janet Ossebaard.

Investigating the case, it was found that it was essentially impossible to determine who this person in charge of the laboratory actually was. As regards the involvement of W.C. Levengood, the official opinion [24] on this case was found and will be commented here. Bearing in mind that Levengood claimed, and still claims, that he has identified what causes crop circles (the plasma vortices hypothesized by Meaden and never seen in action), we now ask the reader to make a little effort and imagine the following scene.

[24] W.C. Levengood, *Lab Report #104*. See: www.francescograssi.com/ebook/ccsoi/v01/c03/024/.

More dead flies on ears of wheat from the 1998 Cherhill formation. Copyright: Janet Ossebaard.

There are many flies feasting on the sap of plants and their proboscis is therefore sticky (don't ask too many questions). Suddenly a plasma vortex arrives, the flies remained trapped in its maelstrom and are carried away. While the vortex flattens the wheat (and creates the formation) elsewhere, at the same time it hurls the flies onto the plants that are still upright, forces them to stick with their proboscis and then, for some unknown reason, also lifts their wings and kills them then and there.

Does this scene make any sense? Could a plasma vortex (assuming that its existence had been demonstrated) trap in its whirlwind many insects that are in a certain area, move somewhere else carrying them, flatten some sectors of the crop, thus creating the formation and propelling the flies only onto the plants that have been left upright so that they stick by their proboscis?

To be honest, even a science fiction film would have trouble making this sound believable. Yet this is what is surmised and stated in Levengood's report of 19 October 2000:

> 4) - the concentration of dead flies adhering to standing plants in the centre of the circles and the standing perimeter plants within the downed areas may be the result of a wide area "sweeping action" from the incoming vortex energies. The insects appear to have been sucked up into counter rotating, interacting vortices(1), where they were carried into another field area and slammed into wheat plants, becoming "glued" in place by gummy substances around their mouth parts.

In another passage from the same report he mentions – far more sensibly and interestingly – that the flies found by Ossebaard were identified as ***Delia Radicum*** *(Cabbage root fly):*

> 5) - these insects were identified (Natural History Museum, UK) as the "Cabbage Root Fly" Delia Radicum. Since it is very uncommen *[sic]* for insects to collect in regions (in this case a wheat field) outside their feeding-mating habitat the vortex deposit mechanism appears very likely.

Moreover, it is difficult to find in the various sources an explicit reference to a picture of the formation inside which Janet Ossebaard found the dead flies. With a little effort, however, the picture [25] can be found by starting from the name of its location (Cherhill).

> [25] The picture can be viewed at www.francescograssi.com/ebook/ccsoi/v01/c03/025/.

Here, once again, the inconsistency of the attitude of supporters of the concept of anomaly and *genuineness* of the formation becomes evident. How can the poor quality and the imperfection of the formation where the dead flies were found be compatible with the myth of *"beautiful and perfect means genuine"*?

But let's press on and try to follow the lead of the hypothesis related to the ***Entomophthora muscae*** fungus [26].

> [26] There are two spelling variants: *Entomophthora muscae* and *Entomophtora muscae*. The first one is the most correct. All fungi known as *Entomophthora* share the characteristic of destroying the insects that they attack. Indeed, the word

> *entomophthora* derives from two Greek words: *éntomon* (insect) [from *éntomon (zôion)*, literally “(animal) cut internally” (*entémnein*, “to cut into”), i.e., “having a body divided into segments”] and *phtora* (destruction) [from *phteiro*, “to destroy”].

What are fungi? They are organisms that are certainly more complex than bacteria and can be likened to plants but are unable to synthesise chlorophyll like plants do and therefore must take nourishment from other life forms. Accordingly, fungi usually feed on dead organisms, but sometimes they attack and destroy still-living organisms. Fungi were classified during their study into several species, and the first species of fungus that could attack and destroy live houseflies and other species of flies was identified in **1855**; its name is indeed *Entomophthora muscae.*

Entomologists divide the evolution of an *Entomophthora muscae* attack into six clearly defined phases [27]:

> [27] Andrzej Batko, *Phylogenesis and taxonomic structure of the entomophthoraceae*, Nowinsky C (ed.), 1974, Ewolucja Biologiczna: Szkice teoretyczne i metodologiczne. Polska Akademia Nauk, Instytyt Filozofii i Socjiologii. Warsaw: Ossolineum (USDA Technical Translation TT-77-54076 Translated from Polish by I. Jampoler).

– **Infection phase.** Infection occurs through the integuments of the insect, i.e., percutaneously. A conidium (a cell that detaches from the vegetative body of the fungus to create a new individual), upon contact with the cuticle of the insect, germinates and perforates the cuticle by enzymatic action.

– **Lipolytic phase** and localised development (with respect to the infection point) in the fat of the body of the host. After penetrating the host organism, the fungus at first grows slowly and does not spread inside the insect’s body. During this phase, the fungus secretes highly active lipases, which digest the fats of the fly.

– **Colonisation of the body of the host** by generalisation of the infection. The fungus spreads very rapidly within the body of the host due to the rapid proliferation of many hyphae (single-cell or multicellular filaments that composes the body of mushrooms). As a

result, the fungus penetrates all parts of the body (abdomen, thorax, and head) irrespective of the infection site. During this phase, the fungus utilizes the nutrients accumulated during the preceding phase without digesting the tissues of the host.

– **Proteolytic phase**. After colonising the entire body of the host or at least its abdomen, the fungus secretes highly active proteolytic enzymes and it penetrates the muscles and other tissues of the insect, rapidly destroying the entire contents of its body. At the end of this phase, the contents of the host body are transformed into a milk-white fluid, which is a suspension of fat droplets and hyphae of the fungus. During this phase, the body of the infected insect is like a thin-walled bag filled with liquid and therefore is soft and flabby.

– **Host body mummification.** After the proteolytic phase, the hyphal bodies of the fungus suspended in the fluid of the body of the host rapidly absorb the liquid that surrounds them and grow rapidly until they form a spongy entanglement. The consistency of the body changes from flabby to rigid. At the end of this phase, the infected parts of the host's body swell strongly due to the pressure of the mass of the parasite's mycelium; every part of the insect extends and expands.

– **Sporulation.** This phase ends with piercing of the integuments and with the exit of the hyphae of the fungus, which grow externally until the progressive final *explosion* of the spores occurs. These spores can even form a halo composed of white particles on the substrate on which the fly died.

Besides the various phases that have been described, the *Entomophthora muscae* induces typical behaviours in infected flies, which typically die in elevated positions and are *forced* to extend their proboscis, which is glued to the substrate by means of sticky particles of the fungus. Finally, the legs are extended and the abdomen is inclined with respect to the substrate, with the wings raised well above the thoracic line. This particular position facilitates

two behaviours in uninfected flies, since the dead fly appears to be feeding or to be offering itself for copulation.

Therefore, uninfected flies approach the dead fly and become infected, since they are attracted by food or they are attracted sexually. Another interesting detail is that insects that are not yet dead can be caught easily and, if released from the substrate and stimulated, are still able to perform some actions that are typical of their species. In the case of flies, they can resume flying temporarily, as indeed Janet Ossebaard reports.

Although all these characteristics explain very well the strange finding of dead flies in the 1998 Cherhill formation, the investigation did not end here.

Fungi and microwaves

While I was conducting my initial research into this case, upon returning from Christmas holidays in **January 2003** I was greatly surprised to find a dead fly attached to the shutter of the French window of one of the rooms of my home. The fly has a stuck proboscis, extended wings and *something* whitish that came out of its abdomen. In practice, all the symptoms of death caused by *Entomophthora muscae.*

With invaluable help from **Marco Morocutti**, electronic project designer and executive member of CICAP, I documented the finding with several detailed photographs that show clearly the proboscis of the fly, extended and stuck to the wood by particles of the fungus, with a textbook arrangement of the body and the wings, and with the fungus emerging from the abdomen.

A dead fly with its proboscis stuck to the wood shutter, discovered by the author. Copyright: Francesco Grassi.

The same fly, photographed from above. Copyright: Francesco Grassi.

Detail of the proboscis stuck to the substrate. Copyright: Francesco Grassi.

Detail of the fungus emerging from the abdomen of the fly. Note the raised wings. Copyright: Francesco Grassi.

After removing the fly from the substrate and placing it in a sterile container, I took it to the mycology department of the University of Pavia for further analysis, the outcome of which will be discussed later. At this point of the investigation I contacted directly Janet Ossebaard, the most important witness to the events, and asked her explicitly for the laboratory results that excluded *Entomophthora muscae* as the natural cause of the death of the flies. Ossebaard replied very politely, saying that the findings were not in her possession but had to be among the material left with her colleague Bert Janssen, another crop circle researcher. She sent the photographs she had taken in 1998 and one of these in particular turned out to be especially interesting. We will see it later.

After I contacted Bert Janssen, he kindly replied, saying that indeed he had the findings but unfortunately they were stored in some package from his last move and therefore were not easy to access. I asked him if he remembered what the findings of the British laboratory said, and this is, verbatim, the essence of his reply:

> The flies were partially covered with some kind of white substance which indicated that the cause of dead was a fungi. But the white substance also pointed in the direction of poisoning with a pesticide. It turned out that neither had caused the dead of the flies. No pesticide remains were found and if the flies would have been killed by a fungi, there should have been some kind of indicator which was missing and therefore their dead could not haven been caused by a fungi.

So *"the flies were partially covered by some kind of white substance"*: a very interesting detail that once again **fit perfectly** in the reconstructed puzzle. It was also interesting to discover that according to Bert's report there was no indicator of the fungus.

Going back to the results of the mycological tests, let's try to understand first of all what these analyses actually are. The goal is to perform an *in vitro* culture of the fungus that protrudes from the abdomen of the insect, thus collecting a sample of the fungus and depositing it in a Petri dish [28].

> [28] *https://en.wikipedia.org/wiki/Petri_dish*.

One waits for the fungus to develop and the result is analysed under a microscope. What is expected is therefore a growth of *Entomophthora muscae*: the *expected indicator*.

The analyses on the fly I had found lasted well over two months and detected only two specific fungi: ***Alternaria*** and ***Cladosporium***. The *Entomophthora muscae* fungus didn't appear in the *in vitro* culture, and there's a reason. After dying because of the fungus, the fly can be colonised by other fungi that normally are unable to attack live insects. In such circumstances, therefore, *Entomophthora muscae* may not appear easily *in vitro* (moreover, it is a particularly challenging fungus to grow *in vitro*). Therefore, in my case, too, the

expected indicator was missing, just as it was in Bert Janssen's statements, but this did not lead to any mysterious conclusion; the *Entomophthora muscae* fungus had not appeared in the culture, but it had certainly been the cause of the death of that fly, since all the symptoms linked to its infection were present. The *Entomophthora muscae* infection is also quite evident in one of the photographs sent to me by Janet Ossebaard, which clearly shows that the abdomen of the fly is swollen and striated due to the fungus.

A dead fly photographed in the July 1998 Cherhill formation by Janet Ossebaard, clearly showing a swollen and striated abdomen caused by the fungus and raised wings. Copyright: Janet Ossebaard.

We have seen how the story of the dead flies was interpreted by Levengood by trying to *force its fit* to corroborate the hypothesis of a plasma vortex acting on cereal fields. The same error of method was made by Eltjo Haselhoff, who had a certain vested interest in mentioning this mysterious episode in his book [29].

[29] Eltjo Haselhoff, *The Deepening Complexity of Crop Circles: Scientific Research & Urban Legends*, Frog Ltd, Berkeley USA 2001, p. 13.

The alleged *exploding flies* would be useful to support the goal to which he wants to take the reader, i.e., that **BOL** (balls of light) are acting and flying over fields while *genuine* crop circles are being formed. Like Levengood with the alleged electromagnetic radiation of the alleged plasma vortices, Haselhoff is convinced furthermore that BOL irradiate plants, causing not only *anomalous* elongations of the nodes [30] of the plants (the *mother of all anomalies* that we will analyse later) but also so-called *expulsion cavities.*

[30] The term *node* will be defined better in the section after the mystery of the dead flies, when we will delve into the story of the *anomalous* elongations described in scientific articles regarding crop circles.

These *expulsion cavities* are constituted by *holes* at the nodes, as if a small explosion had occurred there (here is the analogy with the exploded flies) due to an intense and sudden heating of the plants caused by the radiation originating from the plasma vortex or from the BOL. Both Levengood and Haselhoff, therefore, assume the presence of a radiation of electromagnetic waves, and all this has contributed to plant in the imagination of the public the idea that *generic electromagnetic waves* or *microwaves* are involved during crop circle formation.

On the matter of BOL flying over fields and irradiating crops, it is appropriate to digress briefly and note that the famous “balls of light” video [31] appeared in August **1996**.

[31] One can search, for example, the following keywords on Youtube: *oliver’s castle crop circle*. See: *www.youtube.com/results?search_query=oliver%27s+castle+crop+circle*.

This video shows BOLs flying in formation and creating a crop circle near Devizes, in England, specifically in a field close to the fortification of *Oliver’s Castle* [32], which dates back to the Iron Age. The video caused a sensation and is still being used in television

programmes or on the Internet to support the idea that BOL create crop circles, but it's notoriously a fake.

[32] *www.devizesheritage.org.uk/olivers_castle.html*.

The real name of the videographer who made this video is ***John Wabe***. At dawn he recorded on video the formation that had been created during the night between 10 and 11 August by a team of circlemakers and he added digitally not only the flying balls but also the camera shake to simulate better the action of a handheld video shot without using a camera stand. Moreover, the formation is actually incomplete [33] compared to the original project, and detailed technical analyses [34] that explain the background of the event and demonstrate the discrepancies that reveal the truth are available on the Internet.

[33] Rob Irving, John Lundberg, Mark Pilkington, *The Field Guide: The Art, History and Philosophy of Crop Circle Making*, Strange Attractor Press, London 2006, p. 153.

[34] *cropcircleconnector.com/Sorensen/articles/sorensen.html*.

However, going back to the subject of electromagnetic waves and flies, I carried out some experiments to see whether microwaves were able to make flies explode or induce in them phenomena similar to those produced by the *Entomophthora muscae* fungus. After catching several flies, I placed each insect in small glass vessels closed by thin film for food wrapping.

Using my Whirlpool MT623 microwave oven, I set the power to 650 watts and a maximum irradiation time of 40 seconds while the turntable rotated. Checking the state of the fly every 10 seconds, I obtained absolutely clear and repeatable conclusions:

– death occurs usually in the first 20 seconds

– the flies do not explode

– the proboscis does not elongate and does not become stuck

– the wings do not rise

Houseflies or cabbage root flies?

When the key findings of this investigation were disclosed in various forms [35], some supporters of the crop circle mystery, and particularly the ones fascinated by the story of the dead flies, criticised them.

[35] www.cicap.org/new/prodotto.php?id=3255.

A fly irradiated in a microwave oven. Note that the proboscis is not elongated and the wings are in the rest position. Copyright: Francesco Grassi.

Criticism is usually a positive step in which the healthy verification of any disclosed result allows to determine whether a certain view of the facts is consistent or not. Besides, the publication of my first

article on the subject was indeed a criticism of the commonly accepted approach to the mystery.

Among the various observations, perhaps the following were the most interesting:

– according to some sources, flies died due to the *Entomophthora muscae* fungus in autumn and winter, and this was said to be incompatible with Ossebaard's finding, which occurred in July;

– Janet Ossebaard's flies do not all appear in photographs with a swollen or striated abdomen due to the fungus (*"if death is caused by the fungus, then the fungus must be seen to emerge from the abdomen"*).

As noted in Levengood's report, the 1998 Cherhill flies belonged to the ***Delia Radicum*** [36] species (*Anthomyiidae* family). In other words, they were ***cabbage root flies***, not house flies (*Musca domestica*), which instead belong to the *Muscidae* family.

[36] https://www.google.com/search?hl=it&lr=&ie=UTF-8&q=delia+radicum.

The life cycle varies from one dipteran to another, and so do any infection cycles and periods caused by pathogens such as fungi. The life cycle of *Anthomyiidae*, and therefore the *Entomophthora muscae* infection, can be summarised as follows [37]:

[37] T. M. Butt, C. Jackson and N. Magan (Edited by), *Fungi as Biocontrol Agents. Progress, Problems and Potential,* CABI Publishing, Wallingford 2001, p. 78.

1. *Delia radicum* pupae spend winter in the ground.

2. In spring, infectious conidia of *Entomophthora muscae* are produced and released by the spores that are quiescent in the soil.

3. Adults of *Delia radium* emerge from the pupae **in spring** and become infected by means of the *Entomophthora muscae* conidia.

4. After the incubation period, *Entomophthora muscae* kills a *Delia radicum*. The dead fly remains attached to the plants by its rhizoids and legs. Conidiophores emerge from the abdomen and produce conidia.

5. Conidia are released by the dead insect and infect other *Delia radicum* adults. Multiple successive cycles can occur during the season in the host population.

6. **After midsummer**, a few specimens of *Delia radium* infected with *Entomophthora muscae* develop quiescent spores instead of conidia. After the incubation period, the flies die and fall to the surface of the ground with the quiescent spores. Their abdomen is full of quiescent spores (*azygospores*).

7. The thick-walled quiescent spores survive on the surface of the ground during winter. The following spring they germinate and release primary conidia, completing the cycle.

The period when Janet Ossebaard found the flies coincides perfectly with the life and infection cycle of *Anthomyiidae*.

Moving on the argument of sporulation of the fungus and its visual evidence, the fact that the fungus is not visually evident when the flies are found dead with all the symptoms of *Entomophthora muscae* should not mislead. The swollen and striated abdomen is visible specifically in the sporulation step, but after this the fungus tends to disappear completely and is often practically invisible to the naked eye. Moreover, the fungus is obviously not visible before the sporulation phase begins, although the fly is already dead with its proboscis stuck to the substrate and with its wings raised.

During a crop circle research trip in July-August 2004 I went to England and visited several formation. In the first one of the two that had appeared at Long Barrow (West Kennett, Wiltshire) I found many dead flies, just like in Janet Ossebaard's initial report.

Interestingly, I found them both outside and inside the formation and I was also able to photograph a fly that was still alive but had its proboscis stuck to the substrate and its wings still in the rest position. After freeing this fly, it was able to fly away, exactly as Janet Ossebaard reported in the 1998 Cherhill formation, and certainly went to die elsewhere. The photographs allow to appreciate that in some cases the fungus is visible and in others cannot be detected visually.

This fly was still alive but its proboscis was stuck because it was infected with the Entomophthora muscae *fungus. Copyright: Francesco Grassi.*

A specimen in which the fungus is not visible to the naked eye. The sporulation phase has long ended and the fungus is not visible. Copyright: Francesco Grassi.

A specimen in which the fungus is clearly visible. This is the peak of the sporulation phase. Copyright: Francesco Grassi.

A specimen in which a few fungus particles are visible. The sporulation phase is beginning. Copyright: Francesco Grassi.

I subsequently found flies that had died in the same manner also in other circumstances unrelated to circles. Therefore it is not uncommon to encounter this phenomenon and the reader, too, may have experienced it. However, only selective attention and knowledge of the appropriate information allows to recognise an insect infected by the *Entomophthora muscae* fungus. Personally, I continue to record [38] every occasion in which I encounter this curious phenomenon and therefore I invite the reader to write to me at *francesco@francescograssi.com* if he or she has the same experience.

[38] *francescograssi.blogspot.it/search/label/dead%20flies*.

The sporulation phase has ended and the fungus is not visible. Copyright: Francesco Grassi.

The sporulation phase is evident. Copyright: Francesco Grassi.

The mother of all anomalies

From flies to elongated nodes

The mystery of the dead flies is certainly interesting because it allows to capture aspects that reoccur in the analysis and study of the other anomalies:

– **lack of statistical value:** the alleged anomaly was found in **just one** formation, but the media grapevine has made it seem as if this is a common identification mark that can be observed easily in many other formations.

– **lack of simultaneous presence:** it is incorrectly believed that various anomalies must be found together in the same formations, therefore contributing potentially to discriminating more accurately *genuine* formations from *non-genuine* ones.

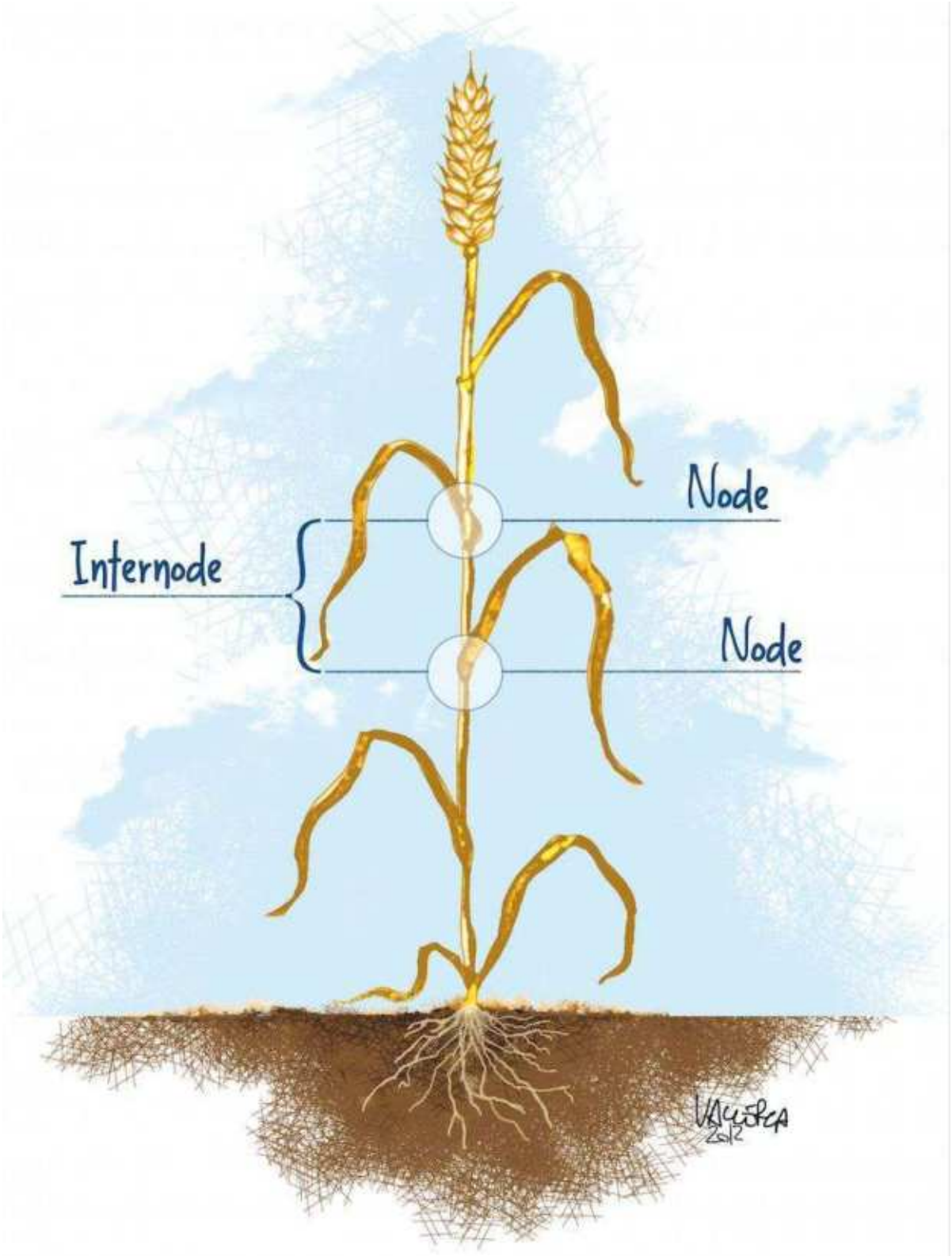
– **inconsistency of indicators:** the crop circle that exhibited the dead flies had a far from perfect and precise shape. How can the lack of *“beauty and perfection”* agree with the presence of the fly anomaly? Can an ugly and imperfect crop circle be *genuine*?

– **superficiality:** superficial investigations carried out by previous researchers in the dead fly case had not been able to identify the true cause of the anomaly.

– **biased conclusions:** Levengood blamed the death on a mechanical cause generated by the alleged plasma vortex; Haselhoff instead hinted that the flies may have been killed by the radiation of a BOL.

– **complexity of the investigation:** it is immensely easier to spread without any control what fact-checking later reveals to be false information than to investigate diligently and in depth before disclosing results.

Countless situations and episodes described as *anomalous* and therefore indicative of the alleged *genuineness* of circles have been reported; the case of the dead flies is just a drop in the ocean. It is an uphill task to shed light and unravel disinterestedly a topic in which legends are generated wildly every day and are amplified by totally uncontrolled progressive distortions. Just consider how much effort it took to get to the bottom of the mystery of the dead flies.


Node
Internode
Node

Culm, nodes and internodes. Illustration by Paolo Vallerga.

This is why I have chosen to concentrate my efforts on the *prime anomaly*: the one that had reached a greater level of importance and credibility than all the others. Had this anomaly turned out to be truly substantiated, crop circles would have become even more interesting and intriguing that they already were to me. But does this ***mother of all anomalies*** actually exist? Fortunately the answer is yes, and it involves the **nodes** of the *culms* (stems) of graminaceous plants, the family to which wheat belongs: I am referring to the famous **anomalous elongation of nodes.**

Usually, along the culm there are 7 to 9 nodes, which are mutually spaced by **internodes**, which are the hollow part of the culm and are the parts that become longer as the plant grows. The **nodes**, which are usually not hollow and are the points to which the leaves are attached, have a characteristic that is very important for the story of crop circles: in ***lodged*** (flattened) conditions they are capable of growing disproportionately, thus orienting the culm vertically.

To understand this better, it is important to know that lodging is the situation in which the plant lies on the ground for reasons that can be **natural** (rain, wind and weather in general) or **artificial**, such as the mechanical crushing caused by the passage of animals, farm vehicles, people and artificial means in general, including boots and circlemaking tools. When the culm is flattened on the ground, the plant produces a higher amount of the hormone **auxin**, which by depositing in the part of the node that is less exposed to the light and therefore faces the ground induces the disproportionate growth of that part of the node, thus allowing the plant to straighten up. Therefore, this is a **survival** mechanism that has always allowed plants to continue to resume a vertical position after accidental flattening, ensuring that they could continue to receive the necessary amount of solar energy.

But why are we talking about these technicalities?

Science enters the field

The *mother of all anomalies*, i.e., **anomalous node elongation**, is the foundation on which the three articles published in the scientific journal *Physiologia Plantarum* mentioned earlier are based. Let us now delve into the details and extract the key concepts.

The three articles were published respectively in **1994, 1999** and **2001:**

– Levengood, W. C. (1994), *Anatomical anomalies in crop formation plants*, Physiologia Plantarum Journal, 92, 356-363. See: *link*;

– Levengood, W. C. & Talbott, N. P. (1999), *Dispersion of energies in worldwide crop formations*, Physiologia Plantarum Journal, 105, 615-624. See: *link*;

– Haselhoff, E. H. (2001), *Opinions and comments on Levengood WC, Talbott NP (1999). Dispersion of energies in worldwide crop formations*, Physiologia Plantarum Journal, 105, 615-624; 111, 123–125. See: *link*.

To summarise, it is important to point out that the **1994** and **1999** articles had the goal of demonstrating that *genuine* formations **were created** by plasma vortices [39] [40], while the **2001** article instead supported the idea of the exclusive **involvement** [41] of a (or multiple) BOL during the alleged creation event.

> [39] Levengood, W. C. (1994), *Anatomical anomalies in crop formation plants*, Physiologia Plantarum Journal, 92, 356-363: *[...] In literature discussing crop circle formations, reference has been made (Meaden 1991) to the possible involvement of ion plasma vortices. At this point we will not be concerned with where or how they are formed, but simply the consequences of their presence*. [...] *There are common aspects among the anomalous features listed in Tab. I which provide*

clues to the general forces producing crop formations. The affected plants have components which suggest the involvement of rapid air movement, ionization, electric fields and transient high temperatures combined with an oxidizing atmosphere. One naturally occurring and organized force incorporating each of these features is, as previously mentioned, an ion plasma vortex, one very high energy example being a lightning discharge.

[40] Levengood, W. C. & Talbott, N. P. (1999), *Dispersion of energies in worldwide crop formations*, Physiologia Plantarum Journal, 105, 615-624: *[...] Abstract: The findings reported here lend further support to a decade of research which suggests that over 95% of worldwide crop formations involve organized ion plasma vortices that [...] it also presents quantitative evidence supporting the hypothesis of the involvement of complex plasma vortex energies as the causative process behind crop formations.*

[41] Haselhoff, E. H. (2001), *Opinions and comments on Levengood WC, Talbott NP (1999). Dispersion of energies in worldwide crop formations*, Physiologia Plantarum Journal, 105, 615-624; 111, 123-125: *[...] However, the circular symmetry of many of the crop formations and several eye-witness reports, mentioning the involvement of 'balls of light' (referred to as BOLs') during the formation of a crop circle (Van den Broeke, personal communication, and Meaden 1991), suggest the introduction of an electromagnetic 'point source' rather than a plane wave.*

These hypotheses were said to be supported by measurement of the elongated nodes of the plants collected from three formations:

– Devizes (England, 1993)

– Chehalis (Washington, USA, 1994)

– Sussex (England, 1994)

After taking measurements, the authors found a length that was increasingly anomalous (the node was **longer** than normal) as proximity to the centre of the formation increased. Vice versa, node length appeared to return to normality in moving from the centre towards the edges.

All three authors assumed that the plants had been struck by radiation of **electromagnetic waves** (generated by the plasma vortex in Levengood and Talbott's hypothesis and by BOL in Haselhoff's) and had reacted to this event with an anomalous

elongation of the nodes that was more conspicuous as the plant was closer to the centre of the formation and therefore to the hypothetical radiating source.

Before going into further detail, however, it is important to show clearly the difference between the approach used by Levengood and Talbott and the one used by Haselhoff. While the first two authors, as mentioned, actually attributed the **creation** of formations to the plasma vortex, Haselhoff was more subtle: he did not claim that BOLs could create crop circles. He introduced their presence as **electromagnetic sources** capable only of inducing the anomalous elongations of plant node, wisely refraining from claiming that they were **capable of flattening** plants. While the plasma vortex hypothesis (capable of flattening and irradiating at the same time) seems truly difficult to consider, what can one say of the hypothesis of another unknown phenomenon such as a BOL, allegedly capable **only of irradiating** but not of flattening?

Since Haselhoff likened the BOL to an **electromagnetic point source**, and knowing well that it is not possible to flatten plants to the ground using only the force of electromagnetic waves [42], he merely mentions the anomalous growth of the node and goes no further [43].

> [42] A 1-kW beam of light or microwaves is already quite powerful yet it applies a force equal to approximately 3.3 micronewtons, equivalent to a weight of 0.34 milligrams. A drop of water would apply more force. A power level sufficient to flatten crops would reduce them to ash long before it flattened them.
>
> [43] Haselhoff, E. H. (2001), *Opinions and comments on Levengood WC, Talbott NP (1999). Dispersion of energies in worldwide crop formations*, Physiologia Plantarum Journal, 105, 615-624; 111, 123-125: *It is demonstrated that this model [...] suggests that the pulvinus length increase in crop-circle formations is caused by an electromagnetic point source.*

Moreover, the approach described in Haselhoff's article was quite at odds with the media campaign that was unleashed after its publication. All the supporters of the mystery in fact contributed to amplify the message that quite contradictorily was highlighted on his

website [44]: *“Scientific Studies Confirm: Crop Circles **made by** ‘Balls of Light’”*.

[44] See: *www.francescograssi.com/ebook/ccsoi/v01/c03/044/*.

Another point that can help the reader in understanding the inconsistency of Levengood and Talbott’s articles is linked to the fact that, quite embarrassingly, the two authors included in their treatise on crop circles natural lodgings [45] in which they found the very same anomalous characteristics that they claimed to have found in *genuine* formations. And all this, instead of suggesting to them that they were following a dead end, convinced them that plasma vortices not only created geometric formations (crop circles) but also created non-geometric formations. At this point the rhetorical question becomes inevitable: so how does one distinguish a natural lodging from one induced by a plasma vortex?

[45] Levengood, W. C. & Talbott, N. P. (1999), *Dispersion of energies in worldwide crop formations*, Physiologia Plantarum Journal, 105, 615-624: *[...] Although many crop formations with very irregular outlines have been attributed to wind damage or overfertilization, we have determined that the same type of complex energy systems appears to be involved in their creation as in those displaying more geometric patterns. In fact plant damage of greater magnitudes and of more complex distributions occurs within the more irregularly outlined crop formations.*

Scientific debate? What scientific debate?

Over the years, these three articles helped to give *scientific solidity* to the mysterious nature of the phenomenon. In **December 2003** Claudio Cocheo, Paolo Russo and myself submitted an article, entitled *Balls Of Light: The Questionable Science of Crop Circles*, to the very same ***Physiologia Plantarum*** journal that had published the first three articles. Our article offered a detailed explanation of the errors made by the three authors of those articles and concluded first of all that the claims of involvement of some form of electromagnetic irradiation at the origin of the formation of crop

circles were not supported by experimental evidence and therefore (more importantly) the facts discussed in our article merely showed that there was a simple difference in the elongation of the nodes of flattened plants inside the circles with respect to plants left upright outside the circles, as is to be expected if any type of mechanical action flattened the plants to the ground.

Of course we expected that our article would be considered for formal scientific review for possible publication. In **February 2004**, however, *Physiologia Plantarum* unexpectedly rejected our article without even subjecting it to peer review. The reason for this will be soon evident.

Accordingly, we decided to add the main details of the rejection by *Physiologia Plantarum* in our article, which was sent to the *Journal of Scientific Exploration* (JSE), which instead published it [46] in **June 2005** after subjecting it to regular peer review.

> [46] Grassi F., Cocheo C., Russo P., *Balls of Light: The Questionable Science of Crop Circles*, Journal of Scientific Exploration, Vol. 19, No. 2, p. 159-170, 2005. See: *www.francescograssi.com/ebook/ccsoi/v01/c03/046/* and Appendix G.

The publication of our article prompted a lively debate (see Appendix G) regarding our conclusions and several rumours circulated about the reason why *Physiologia Plantarum* had rejected it, to the point that in **August 2006** we decided to ask **Dr. Vaughan Hurry** (director of the journal) permission to publish online the original letter with the reasons for the rejection. Vaughan Hurry granted permission and so we published everything on CICAP's website [47].

> [47] *www.cicap.org/crops/en/013.htm*.

This background information is important because it allows the reader to assess the validity of our work without having to delve excessively into the merits of the content of the four articles, which would be truly arduous, since their technical aspects require a command of **physics**, **mathematics** and **statistics** beyond typical school knowledge.

So let's see why *Physiologia Plantarum* rejected the article (bold added by the author):

> Email Sent: Monday 23 February 2004 11.50
>
> Subject: Manuscript PPL-2003-00411 Decision
>
> Editorial decision: Reject without review
>
> Dear Dr. Francesco Grassi,
>
> I have read your paper 'Balls of light: the questionable science of crop-circles formations' (PPL-2003-00411) submitted to Physiologia Plantarum. I have gone back and read these 2 previous papers and the comments on them and looked at their citation histories. The 1994 Levengood paper was self-cited in the follow up paper in 1999, which in turn was only ever cited in Haselhoff's and Deardoff's comments in 2001.
>
> I have read your letter and your manuscript several times. While **you have been more polite** than I would be, in describing this as "questionable science", I think we agree that **this topic is more suited to the popular press than to a scientific forum**. The original papers were submitted to the journal and were subjected to the normal peer-review and were, **regrettably in my view**, recommended for publication and therefore published. Your point is that, given that this journal has published in the past papers that were **questionable, in your view and mine**, then this journal is therefore the best place to continue this discussion. I understand your point of view and I respect your wish to set the record straight, as you see it, but I must disagree.
>
> The original papers by Levengood were published, and comments/criticisms of these were also subsequently published (Haselhoff 111(1) & Deardoff 111(1)) – inadequate though you may feel these were. After serious consideration I believe that to "continue this discussion", when clearly from the citation record **there is not a scientific discussion** in progress, **only gives it substance and credibility it does not merit.** I can therefore not accept your manuscript for publication in our journal.
>
> I am sorry to disappoint you but I wish you every success in publishing your paper in a more appropriate forum.
>
> Yours sincerely,
>
> Dr. Vaughan Hurry
>
> Subject Editor
>
> Physiologia Plantarum

I don't know how you take it, but quite honestly this is one of the most *"welcome"* rejections I have ever received.

A white flying donkey

A brief technical digression is in order at this point so that the reader can get a taste of the content of the three articles being criticised and of the criticism we proposed in our article in the JSE. We already mentioned that the samples of nodes of the plants examined by the three authors had been gathered in just three formations. Here they are again:

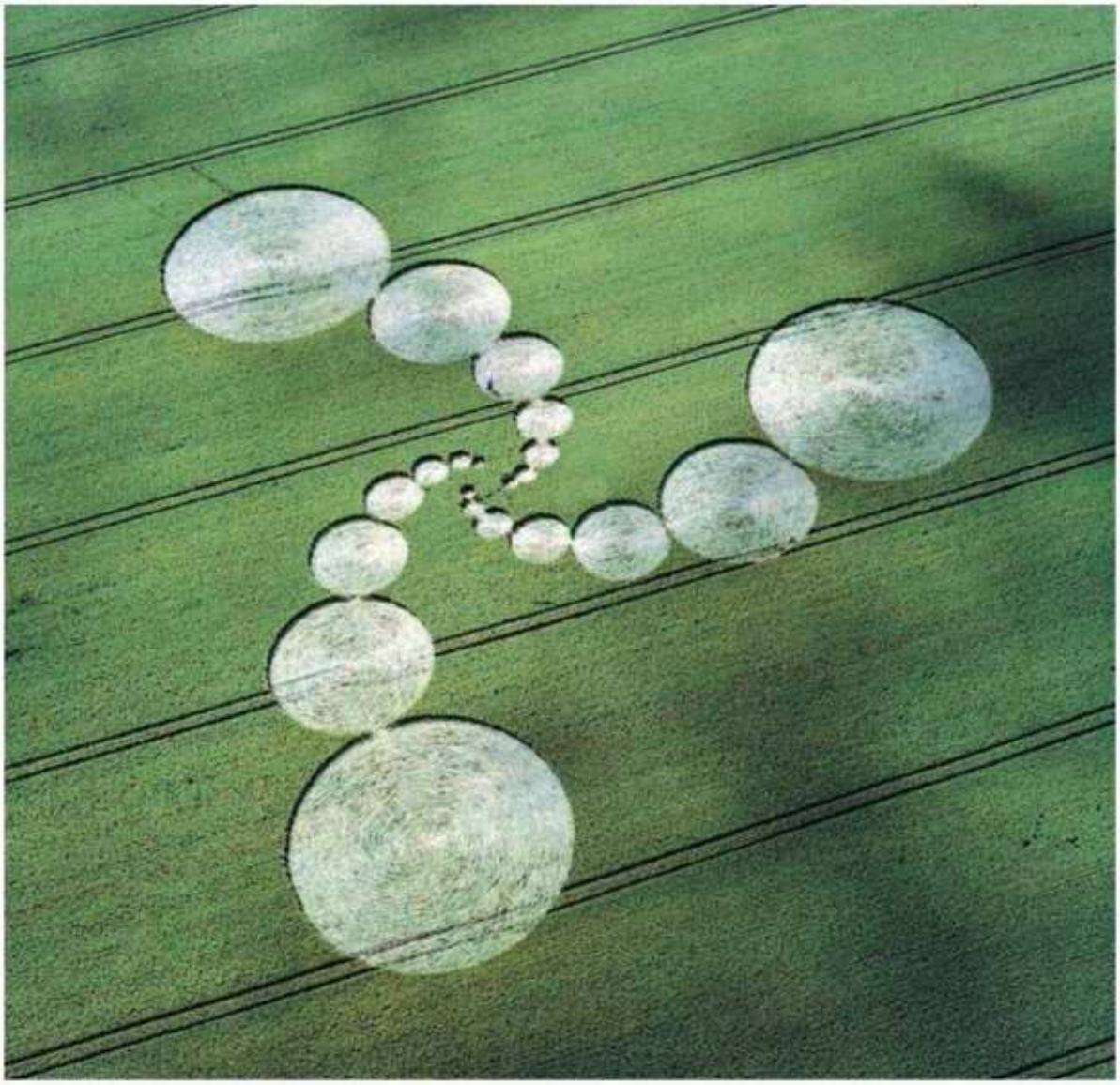
– Devizes (England, 1993)

– Chehalis (Washington, USA, 1994)

– Sussex (England, 1994)

It goes without saying that Levengood, Talbott and Haselhoff assume unconditionally that these three formations are *genuine*. Moreover, Haselhoff extends his scope a little further and includes in his article the data of a fourth formation [48] that was certainly man-made: a Dutch formation created in **1997** by **Remko Delfgaauw** with five other people at ***Dreischor*** (sometimes referenced as *Nieuwerkerk*), Schouwen-Duiveland. We already mentioned Delfgaauw with reference to the world's largest formation to date.

[48] *www.xld-sign.com/projecten/bekijk/De-gulden-tunnel*.



The Dutch formation of Dreischor (or Nieuwerkerk), 1997. Copyright: Remko Delfgaauw - xld-sign.com.

The 1997 formation in Dreischor is mentioned by Haselhoff indeed because it allegedly does not have the same characteristics of *genuineness* that the first three formations possess and is said to be what is known in the scientific method as a *control* sample.

Leaving aside this premise, it is important to note that the number of formations examined is really small (just three) and that if one

references the charts [49] and counts the sampled points (i.e., the regions where the plants were reportedly collected in each formation) one finds essentially the following situation:

– Devizes: **6** regions

– Chehalis: **4** regions

– Sussex: **6** regions

> [49] Levengood, W. C. & Talbott, N. P. (1999), *Dispersion of energies in worldwide crop formations*, Physiologia Plantarum Journal, 105, 615-624. See: *www.francescograssi.com/ebook/ccsoi/v01/c03/049/*.

To clarify: moving away from the centre and following a radial line, Levengood and Talbott chose respectively six, four and six regions where plants were collected and the average length of the nodes was calculated. From a statistical standpoint, it is fairly obvious that such a small number of points is truly insufficient to draw meaningful conclusions, especially when the hypothesis to be supported is so **extraordinary** (the existence of the plasma vortex or of an irradiating BOL).

Consider an example of common-sense statistics in a non-extraordinary situation: **presidential elections** in an entire country. Assume there are two candidates, **Smith** and **Jones**, and that you conduct an exit poll at **3** polling stations, interviewing a total of **16** people: six at the first station, four in the second one and six in the third one. Would you be willing to say, after just 16 interviews, that it's very likely that Smith (or Jones) will win? Would anyone trust conclusions drawn on such a small number of exit polls taken from such a small number of polling stations?

Imagine, moreover, that the interviews reported **12** votes in favour of Smith and therefore 4 in favour of Jones. Would anyone think that Smith should start issuing triumphant statements with an apparent percentage of **over 70%**?

Therefore, especially when one is introducing unknown phenomena (such as the plasma vortex or the BOL) and therefore is in the realm of extraordinary claims, from a statistical standpoint one needs a truly large data set to be confident in stating (and perhaps one should always add a *"maybe"*) that what one is seeing in the sky is **an actual white flying donkey** rather than **a cloud that vaguely resembles a donkey** [50].

> [50] See Appendix G, Part 1: *Furthermore, it is very important to remark that performing statistical tests with so little data is likely to result in "freak" results which are unlikely to be statistically significant*.

Haselhoff's article includes ***Table 1***, which lists the numbers for each formation. Let's look at them and then try to understand what they mean.

Location	Levengood and Talbott (1999)	Corrected exponential	BOL	
				h(m)
Devizes	0.91	0.75	0.87	1.9
Chehalis	0.99	1.00	1.00	9.5
Sussex	0.98	0.96	0.98	7.8
Nieuwerkerk	-	0.54	0.54	17.0

What do they mean? For example, what is the meaning of the value **0.91** in the ***Levengood and Talbott (1999)*** column?

In statistics, these numbers indicate the ***Pearson correlation coefficient***, which is referenced generally by the letter **R**. The Pearson coefficient is obtained by calculation and is necessarily always comprised between **-1** and **+1**. The closer **R** is to **zero**, the

more the data being analysed **are not correlated**. As **R** approaches **+1, correlation increases**, and finally as **R** approaches **-1 anticorrelation increases**, i.e., as one data series increases the other one decreases. In summary:

– **R = -1** means that the analysed data are perfectly anticorrelated;

– **R = 0** means that the analysed data are uncorrelated;

– **R =+1** means that the analysed data are perfectly correlated.

It should be specified that *data* is understood to reference pairs of numbers of the type of (X, Y). In the case we are examining, X is the distance of the region (where the plants were collected) from the centre of the formation along a radial line and Y is the average length of the nodes of the plants gathered at the distance X.

With these pairs of numbers it is possible to hypothesise various mathematical models capable of accounting for a possible relationship between the numbers.

Let's try to simplify. To visualise the concept of a mathematical model, imagine that you have an electronic machine to which you feed **X**, the number that represents relative distance from the centre. The machine processes everything according to a preset logic, performs calculations and *spits out* a new number **Y**, i.e., node length.

Now imagine that you have two machines: the first one is called **LEM** (acronym of *Levengood's Electronic Machine*) and we'll assume that it can process data according to the mathematical model of the plasma vortex hypothesised by Levengood. The second one is called HEM (*Haselhoff's Electronic Machine*) and we'll assume that it can process data according to the BOL mathematical model hypothesised by Haselhoff. LEM and HEM are, therefore, two machines capable of processing the same information in different ways.

The question here is which is the best machine. LEM or HEM? In other words, who is right, Levengood or Haselhoff? Which is more ***real***, the plasma vortex or the BOL?

You already know from the previous pages that these two machines don't work at all. But let's continue, so that we can understand the arguments made by Haselhoff in his article, and go back therefore to ***Table 1***.

Levengood and Talbott calculated **R** (the values of the first column) by using the LEM machine, and since the resulting **R** values were indeed rather close to 1 (i.e., 0.91, 0.99, 0.98) they deemed that this was sufficient to state that they had confidently seen their **white flying donkey** in the sky.

In the 2001 article, instead, Haselhoff, after finding that some of the gears of the LEM didn't turn too well [51], fixed the malfunctioning gears and calculated the new values of **R** (the ***Corrected exponential*** column: 0.75, 1.00, 0.96, 0.54) by means of the corrected LEM and also included a fourth **R**, the one of the man-made formation in Dreischor (referenced as *Nieuwerkerk* in the table). The value of **R** obtained for this last formation turned out to be lower (0.54) than the others.

> [51] See Appendix G, part 1: *Two years later, Haselhoff criticised this paper, pointing at two major flaws: the normal node length was assumed to be zero and energy spreading with distance was not taken into account. He then suggested correcting the first error by subtracting a term N_0, representing the average node length of undisturbed (control) plants outside the formations. He implicitly accepted both the questionable sampling strategy of the Levengood and Talbott experiments and the thermo-mechanical hypothesis explaining the node elongation.*

Haselhoff then used his HEM [52], recalculated the four values of **R** and obtained the following results (first column of the two with the *BOL* heading):

– **0.87** for Devizes (greater than the 0.75 obtained with the LEM)

– **1.00** for Chehalis (equal to the 1.00 obtained with the LEM)

– **0.98** for Sussex (greater than the 0.96 obtained with the LEM)

– **0.54** for Dreischor (equal to the 0.54 obtained with the LEM)

> [52] See Appendix G, part 1: *Therefore, he proposed an electromagnetic point source model, assuming it as a "Ball Of Light" (BOL) irradiating the underlying crop field. In order to support his hypothesis he reported, as a counter-proof, the results of a study carried out on a surely manmade formation in Nieuwerkerk in 1997, in which the same reciprocal quadratic trend seemed not to be evident.*

To Haselhoff, this was incontrovertible proof of the crushing superiority of his HEM over Levengood's LEM. To summarise with other words Haselhoff's position using the flying white donkey example, one might say:

> If you look at my **R** values, you'll see that they are closer to 1 than Levengood and Talbott's; therefore I can state that my **flying white donkey** (the BOL model incorporated in the HEM) also has **green ears** and is much prettier than Levengood and Talbott's model (the plasma vortex model incorporated in the LEM). Furthermore, I confirm that the man-made Dreischor formation is **very poor and is an absolutely ordinary and trivial grey cloud.**

We noted earlier that this index **R**, the Pearson coefficient, on which the certainties of the three authors are based, is a statistical value that indicates how much the data being analysed are mathematically correlated. But what they all neglect is another fact that must be taken into account when one uses the scientific method in reaching conclusions:

Correlation is not necessarily evidence of causation.

This is one of the biggest mistakes made by the three authors in their articles. Even if one brushes aside the fact that the examined data are really sparse and one accepts that there is a mathematical correlation of the data, all this **in any case** does not allow one to deduce the existence of a cause-and-effect mechanism between the plasma vortex or BOL and node elongation. As evidence of the fact that relying on the Pearson coefficient **R** to reach such incredible

conclusions is really quite meaningless, Claudio Cocheo, Paolo Russo and myself indeed *amused* ourselves by hypothesising a third machine, which we will call GEM (Grassi's Electronic Machine). The GEM is set up according to a far simpler mathematical model that the ones proposed by Levengood and Haselhoff: the model of a simple straight line. It is thus possible to test the GEM, calculate the corresponding **R** values, and therefore compare the validity of the three machines, i.e., the validity of LEM, HEM and GEM. Which one will win?

Well, by introducing this simpler model of a linear type and recalculating the values of **R** with the GEM, we obtained better statistical values than those obtained by the HEM, which in turn were better than those of the LEM. In other words, Grassi (with his straight line) beats Haselhoff (with his BOL), who beats Levengood (with his plasma vortex). Therefore, if we follow the logic used by the three authors, this should make me and my colleagues Cocheo and Russo jump for joy, because we have found our **flying white donkey** not only with **green ears** but also with a **blue tail** [53]. This example shows how all the founding logic used by Levengood, Talbott and Haselhoff for their arguments is completely wrong from the outset, in addition to the many other more technical considerations presented in the article published in the JSE.

> [53] See Appendix G, Part 1: *We point out also that a simple linear regression, with the same number of parameters, fits the data sets better than the BOL model (Table 2b). Of course, we are not suggesting the existence of a specific underlying linear phenomenon, we are only pointing out a basic concept: correlation is not proof of causation.*

However, one of these technical considerations absolutely cannot be ignored: in science, experimental data cannot be treated arbitrarily, using only the data items that agree with the desired goal and excluding the ones that might contradict the hypothesis that one is trying to demonstrate aprioristically. The authors of these articles have excluded without any justification from the calculation of their models the results of the measurements of the nodes of the tufts of

plants that remained upright at the centre of the formations. On the contrary, they instead included the data of the upright plants outside the formations. The measurements related to the central tufts didn't agree well with the mathematical models that they supported, while the ones outside the circle apparently improved the correlations. To make a trivial example, this is like counting only the credits and forgetting the debts in a home budget.

Having come this far, we are already delving into rather challenging concepts; to avoid further technicalities, we refer anyone who wishes to go further in-depth on the topic to the official articles and the various reactions that followed, at first online and then leading to two last articles published once again by the JSE, one written by Haselhoff and the other written again by myself, Claudio Cocheo and Paolo Russo, as presented in Appendix G.

In any case, the conclusion remains unchanged: so far, no flying white donkey has been spotted in the sky. Tomorrow? We'll see.

Essential crop circle timeline

At this point it is appropriate to provide a timeline of the main facts of crop circle history. This is a small summary, which I think is a crucial compass for finding your way effectively in this complex phenomenon by seeing it briefly in its entirety.

800 – **Agobard**, archbishop of Lyon, born in Spain in 779 and died in Lyon in 840, reports and censures in his work *Contra insulsam vulgi opinionem de grandine e tonitruis* the false belief of his contemporaries in the *Tempestarii*. This document is associated with the crop circle phenomenon by distorting its meaning.

1678 – In August of this year a pamphlet is published in the English county of Hertfordshire and tells the story of the ***Mowing Devil***. This should not be construed as a factual report but as a tale of two clashing social classes: the poor mower and the rich farmer.

1686 – **Robert Plot** publishes the treatise *The Natural History of Staffordshire*, in which he claims that rings in the grass, having a more or less dark colour, are caused by lightning. These are not circles in crops, but formations produced by so-called *fairy rings* or, in the case of the ring containing a square, by so-called *cropmarks*.

1880 – John Rand Capron, in the May-October issue of *Nature* journal, reports a strange lodging of crops. He attributes it to the action of wind, which had created several circular areas with an upright tuft inside them. This is a natural lodging.

1966 – On 19 January, **George Pedley** witnesses a UFO sighting, with associated marks on the ground, in a lagoon near Tully, in Queensland, Australia. That same year, **Doug Bower**, who has been living in Australia since 1958, experiences the media fracas caused

by the news and is impressed by it. In autumn of the same year Doug returns to Britain.

1978 – The exact year is uncertain, but around this time **Doug Bower** convinces his friend **Dave Chorley** to help him make crop circles in the British countryside. Their goal is to create a prank, i.e., circular marks that might suggest the landing of UFOs (in the improper sense of **alien spacecraft**).

1980 – **Terence Meaden** is the first man to study and promote crop circles, attracted by a series of circles created by Doug and Dave. He is convinced that a new atmospheric phenomenon (**plasma vortex**) acting downward from above is capable of creating the formations.

1981 – **Pat Delgado** begins promoting crop circles. Together with **Colin Andrews**, who will join him a few years later, he doesn't indicate a specific cause but merely acknowledges that there is an intelligence behind the phenomenon. He is not entirely wrong.

1989 – Pat Delgado and Colin Andrews publish the very first book on crop circles: **Circular Evidence**.

1991 – In January, **W.C. Levengood** contacts Pat Delgado to obtain samples of wheat collected inside crop circles in order to perform further analyses, which will be the initial factor that will prompt Levengood to publish a first scientific article in 1994. Levengood and his colleague Nancy Talbott are convinced that crop circles are formed by **plasma vortices**.

1991 – On 9 September, the British newspaper *Today* publishes a report in which **Doug Bower** and **Dave Chorley** state that they had begun their circlemaking a few years before 1980 and show their methods, fooling Pat Delgado, the various *experts* of the time and all the community of believers.

1994 – **W.C. Levengood** is granted publication of his first article in the science journal ***Physiologia Plantarum*.** In his article he tries to present scientific evidence to demonstrate that crop circles are created by **plasma vortices**.

1996 – A video shot by cameraman John Wabe by using a computer to artificially superimpose flying BOLs over the formation at **Oliver's Castle**, created during the night by a group of circlemakers, begins to circulate in the crop circle community. The video is a sensational fake, yet even today it is still presented in the media.

1999 – **W.C. Levengood** and **Nancy Talbott** are granted publication of a second article in the science journal ***Physiologia Plantarum***. Once again, their goal is to bring scientific evidence that **plasma vortices** are responsible for creating crop circles.

2001 – **Eltjo Haselhoff** is granted publication, again in the science journal ***Physiologia Plantarum***, of his opinions and comments on the earlier article by Levengood and Talbott, published in 1999. Haselhoff is convinced that he has provided evidence demonstrating that **BOLs** irradiate the crops during crop circle creation. However, he claims that circles are not created by BOLs.

2003 – In December, **Francesco Grassi, Claudio Cocheo** and **Paolo Russo** send their article *Balls of Light: the Questionable Science of Crop Circles* to the science journal *Physiologia Plantarum*. The content of their article shows that the three previous articles are unsubstantiated.

2004 – In February, the science journal ***Physiologia Plantarum*** rejects the article by Grassi, Cocheo and Russo. The journal deems that the subject of crop circles is more suitable for *popular* press than for a science forum and does not intend to continue publishing articles on the topic in order to avoid backing and giving credibility to the phenomenon, which has no merit from the scientific standpoint.

2005 – In June, the ***Journal of Scientific Exploration*** *(JSE)* publishes the article *Balls of Light: the Questionable Science of Crop Circles* by Francesco Grassi, Claudio Cocheo and Paolo Russo rejected earlier by ***Physiologia Plantarum***. The article that demonstrates scientifically that the three previous articles are unsubstantiated is finally published.

2005 – Also in June, Eltjo Haselhoff writes and publishes on the Internet a quick and brief reply to the article by Grassi, Cocheo and Russo.

2006 – In July, Grassi, Cocheo and Russo reply on the Internet to Eltjo Haselhoff's previous reaction.

2007 – In October, the *Journal of Scientific Exploration* (JSE) publishes a formal reply to the article by Grassi, Cocheo and Russo, written by Haselhoff, and at the same time publishes a further reply by Grassi, Cocheo and Russo to this last reply. All this, however, does not change the essence of the conclusions reached. Since October 2007, so far no further articles on crop circles have appeared in a science journal.

OUT OF THE CIRCLE

The time came to come clean and wake from the dream
The papers were informed,
On worldwide T.V. screens and in magazines
They were the men who conned the world

Now old Cheesefoot Head will never forget
What happened in her past,
You know I sat and wept on the day you left
But I know your legacy will last

The *light side* and the *dark side* of the phenomenon

During the crop circle season, which in the United Kingdom usually spans from May to August, many *croppies* travel in pilgrimage to the various formations, which are also known as ***temporary temples*** and are located in a rather limited region of England, mainly in Wiltshire, which has an area of approximately 3500 km². To appreciate the extent of this area, consider a circle with a radius of approximately **34 km**. Therefore, by flying on an ultralight aircraft, using one of the many services available for hire in the area, it is possible to photograph and *visit* from above all the best circles within 30-60 minutes.

Pilgrimage on foot or by air, together with the countless websites on the subject, the available books, the many TV programmes that cover this mystery and also the conferences crowded by believer communities are the ***light side*** of the phenomenon, i.e., everything that is easily reachable and usable by any more or less interested person. However, there is a ***dark side*** of the phenomenon, the one linked to circlemakers, i.e., the people who, during the night, creates these *temporary temples*, which in daylight become the subject of the mystery.

Since the early years of the circlemaking activity that Doug and Dave began, many imitators started to play the same game, attracted by the attention generated by those simple circular shapes imprinted in the plants. Therefore, both before September 1991, when Doug and Dave revealed the main circlemaking methods, and especially after discovering the obvious explanation, new circlemakers came forth, perhaps just to see what it was like to be one. The various circlemaker teams didn’t have to be aware of each other. Someone

simply needed to come up with the idea and the will to do it, so Doug and Dave's passion for circlemaking began to spread not only to some of their compatriots but also to people who lived in other parts of the world. It is in any case unquestionable that the quality of English circles has always been the highest so far. But what can prompt people to continue creating these formations at night? Is it the will to prank other people?

When I began my investigation of the crop circle phenomenon, I was rather convinced that these formations could be created, but I wasn't aware of the details and couldn't understand the reasons that made people continue to produce those increasingly complex shapes in fields. I decided that this was a new, genuine mystery to be investigated within the entire phenomenon. Would I be able to create *true* crop circles? Who are the people behind the circles, and what are their motivations? Is it only the wish to continue a prank indefinitely?

In autumn 2003 I was made aware of a video documentary produced by British circlemaker **Matthew Williams**, which contained interviews with ten circlemakers (including the one and only Doug Bower) and I was able to make contact with Williams to purchase a copy [1].

> [1] A patient and careful transcription of the three hours of interviews allows the reader to experience this video documentary by means of its text content, which is available in Appendix C of this book. The ten original interviews are also available online with English and Italian subtitles: if they do not appear automatically, please use the Youtube settings to enable them. See *www.francescograssi.com/ebook/ccsoi/v01/c04/001/*.

Studying this video documentary allowed me to begin to explore the *philosophies* of thought that British circlemakers had developed over the years, and this prompted me to believe that it was appropriate to dive in at the deep end of this new and incredible experience: i.e., to learn circlemaking.

To become a circlemaker and see with my own eyes the *dark side* of the phenomenon, I therefore went to England in the summer of 2004 and thanks to my contact with Matthew Williams I was able to take part in the creation of important English formations.

It wasn't easy to make contact with the circlemaker community. They are an absolute minority and are considered essentially **pariahs** by the believer and croppie communities, since they are considered abject people whose only goal is to discredit the phenomenon and create confusion within a mystery that is already in itself difficult to penetrate. Yet paradoxically it is thanks to the circlemakers and their unattributed nocturnal creations that the phenomenon has continued to exist and proliferate for decades. Given this premise, it is clearly difficult to make friends with them and especially to be accepted by them as a resource in their nocturnal teams. Despite these difficulties, I was successful, and thanks to my experience in the field I was able to challenge various myths that over the years have established themselves around crop circles and circlemakers.

First of all, it is not true that there are teams that always consist of the same people and perhaps compete to create the most beautiful or most appreciated formation of the season. On the contrary, the concept of team is very **dynamic**. The people required to create a formation are in fact recruited even just a few hours before work begins, drawing upon trusted friends and people of one's own *circle* with which there is a time-honoured relationship.

How many authors does a formation have? Undoubtedly only one, the mind behind the formation, the person who creates the project of the crop circle and then puts it on paper, guiding its nighttime creation perhaps together with a small number of other people. In a manner similar to what occurs for large buildings, in practice the author is the architect; the individual people or work teams that create the construction are not.

Another myth is linked to the number of people that make up the team. It is absolutely untrue that many people are needed in order to create large and complex formations. A group of **four or five people** who work well together is able to create truly **majestic** and impressive work. Therefore, the opposite is true: the larger the team, the harder it is to move in the field. Coordinating five people is one thing, but coordinating ten, unless each one has a clear picture of his or her role, makes creation very difficult.

The number of people must be planned exactly before entering the field. Any excess only makes things more complicated. Conversely, an insufficient number of participants may even make it impossible to create the circle.

One of the most deeply rooted myths is the belief that creating crop circles requires highly technical equipment, such as GPS systems or night vision goggles to move in the dark. Unfortunately, currently commercially available GPS systems still have a very coarse precision compared to what can be achieved with a simple surveyor's tape measure in the field. As regards the impossibility of night vision, our own eyes are more than adequate in the dark because they adapt rather rapidly to darkness and with some practice one is able to move in fields with great freedom.

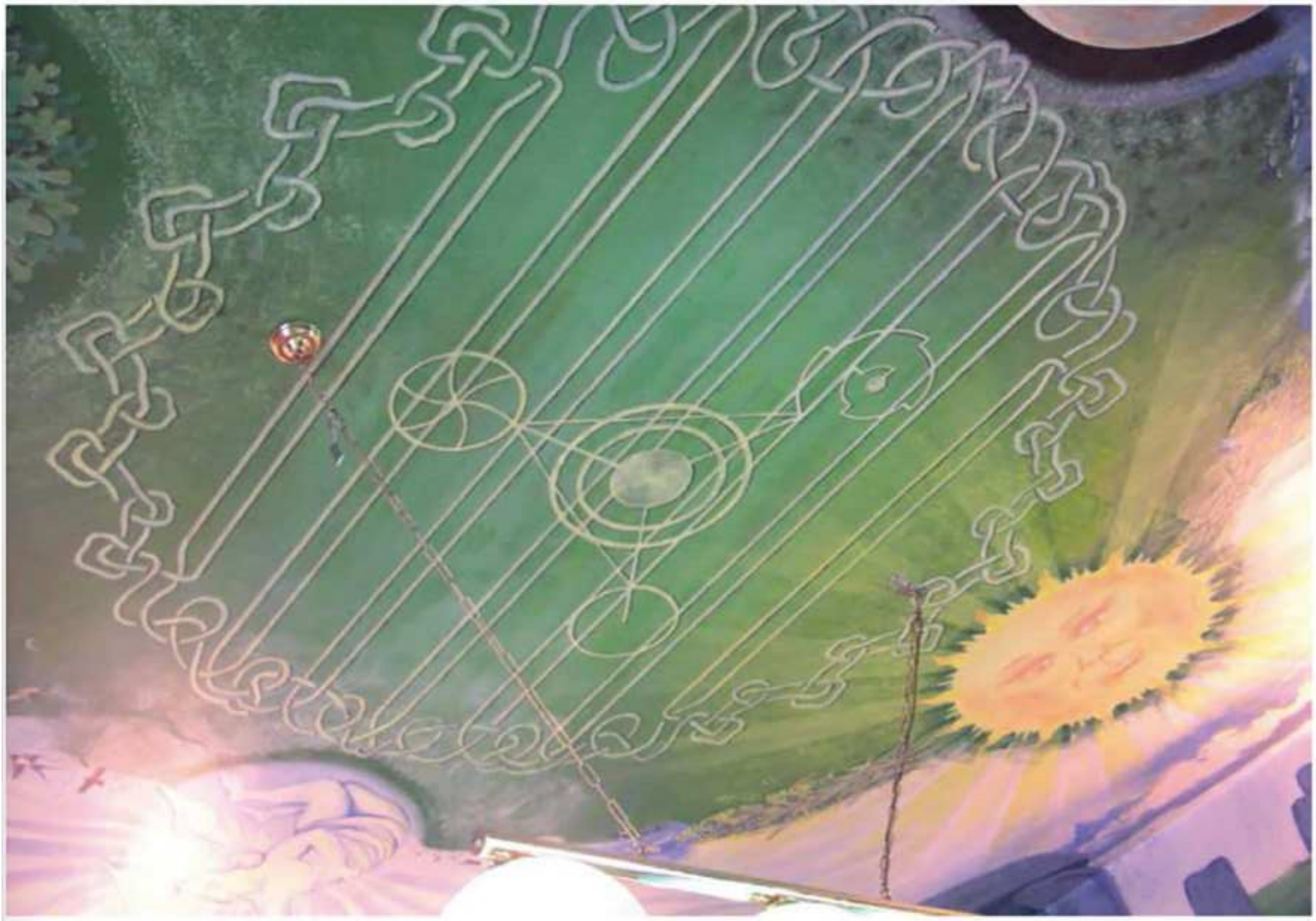
One very interesting aspect that I was able to observe by visiting the English crop circle region in person is that there is a key venue for circlemaker activity: the pub known as *The Barge Inn* (*www.the-barge-inn.com*).

The entrance to The Barge Inn pub. Copyright: Francesco Grassi.

The canal behind the pub. Copyright: Francesco Grassi.

The campsite near the pub. Copyright: Francesco Grassi.

View of the campsite from inside the pub. Copyright: Andrea Feliziani.



The ceiling of the pub, decorated with the well-known formation of Barbury Castle (1991). Copyright: Francesco Grassi.

Here it is usually possible to camp, get some food and perhaps go fishing by the canal that runs nearby. When the pub is about to close it is normal to see groups of people assembling and continuing to chat, as in any other pub, but at The Barge Inn many of these groups are circlemakers who are making arrangements for their nocturnal activities, deciding the field where they will create the formation, contacting and making appointments with friends who perhaps are not there in person at that moment.

What happens after this is absolutely incredible and needs to be experienced in person. If you're part of the right *circle*, you end up loading your car with the necessary instruments (including tape measures, planks for flattening the crops, position-marking poles) and then setting off to reach the agreed spot where the car will be parked in the vicinity of the field chosen for the formation.

Normally, after turning off the lights and waiting for a few minutes, you begin to walk with the instruments toward the field, following paths that are known or were spotted during the day in a previous survey. Once the edge of the field is reached, everybody follows the *tramlines* (the straight lines that do not have upright crops), and gathers at the point from which circlemaking will begin.

What is the motivation that makes circlemakers spend their nights creating these works without taking credit for them? My experience made me realise vividly that the purpose is never to prank or mock those who will visit the formation in the following days. To simplify, we can say that there are basically two kinds of approach: teams that work only for art's sake and teams that add to the art something more, a very special **spiritual aspect**. Between these two extremes there is certainly a range of variations.

Personally, during my British experience I was able to join teams of the second type and it was absolutely incredible to take part in true new age prayers before beginning to create the formation on the ground.

Usually this ritual was conducted by standing all together in a line, within the tramline. In complete silence, the leader would recite free verses, invoking for example *“infinite energies above us”* so that they could give the circlemakers in the field the strength to complete the formation and so that the formation itself would give positive sensations to the pilgrims. Sometimes the *energies* were even asked to allow paranormal experiences during nighttime work. All this was done considering, therefore, the people in the field as the **intermediaries of a higher will** that would guide them in the creation of a **magical shape** to be imprinted on the ground. At the end of the spontaneous verses, the leader would close the prayer with an *“amen”* and then the circlemakers would repeat the word *“amen”* altogether, as in a **religious service** [2]. This is a sort of belief system that is parallel to the belief system of believers who live in the *light side* of the phenomenon. This is why I find it absolutely fitting to call modern formations *temporary temples*. The people who erect them do so by exercising a spirituality of their own and those who *use* them do the same.

> [2] It should be noted that in recent years some Italian media tend to emphasise this spiritual and emotional aspect of circlemakers, giving more space to anecdotes that describe, for example, the presence of BOL in the field during the human creation of the formations, the presence of *mysterious dark figures* in the field together with the team at work, or the narration of paranormal experiences reported firsthand by the circlemakers. Many examples of these anecdotes are in Appendix E, in the interviews granted by the circlemakers themselves. In the future the phenomenon may evolve in this direction from a media standpoint. No longer denial or persecution of circlemakers, as has always happened historically, but emphasis on the *magical* aspect linked to the activity of circlemaking.

To be in a field of wheat at night during a ritual of this kind is a truly disconcerting, dreamlike, unique, embracing and surreal experience, in which everything acquires a new dimension, a magical dimension,

during which all the physical activities that lead to the construction of the crop circle then take form.

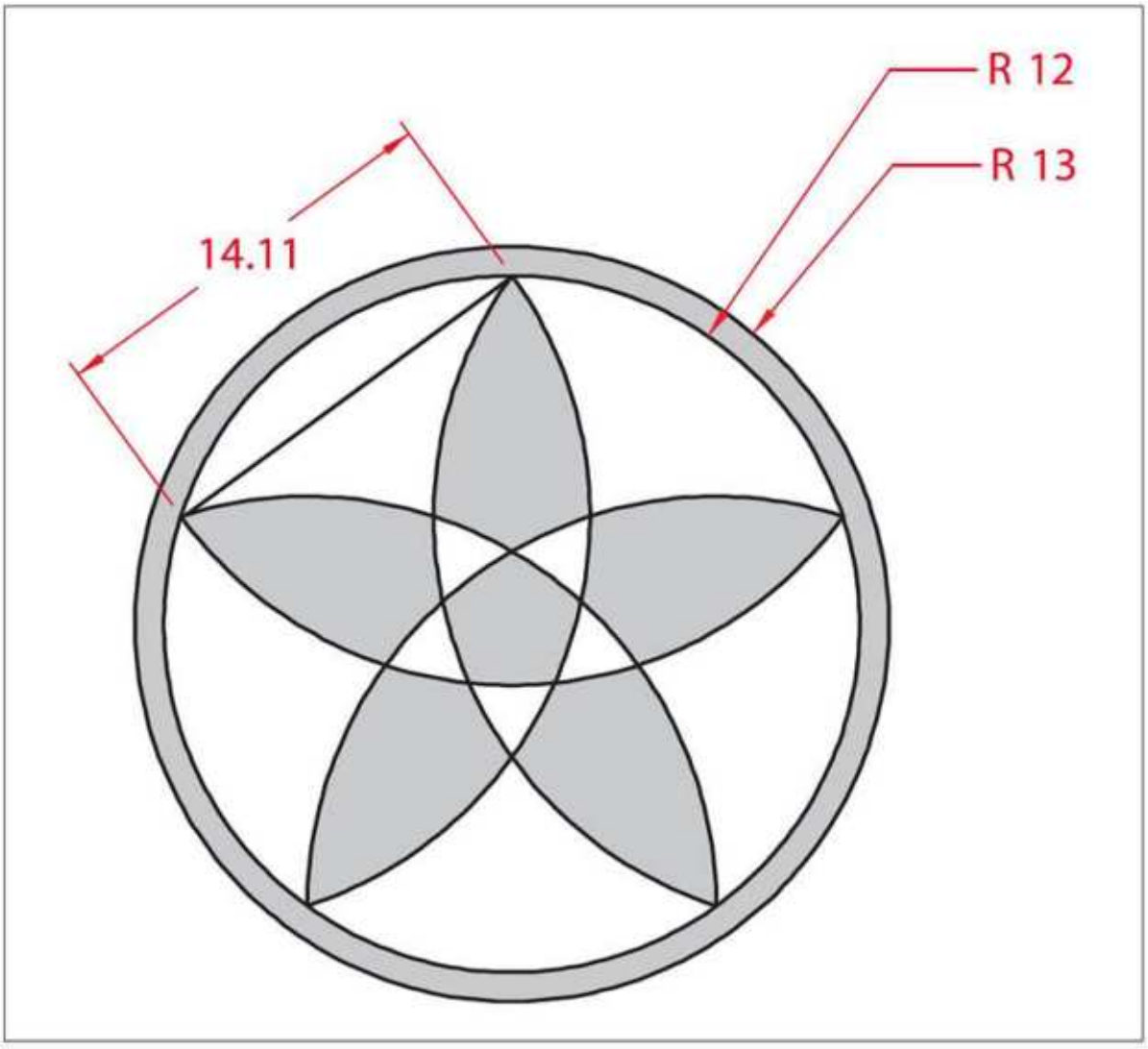
Drawing upon this exceptional experience, the following year (June 2005) I guided the students of CICAP's *Course on scientific investigation of the alleged paranormal* in creating a formation [3] in a field of wheat near Bra, in the Italian region of Piedmont. To date I have publicly created two crop circles for Italian television programmes. The first TV report was broadcast in November 2006 on the RAI2 channel as part of the programme *Voyager*, while the second one was aired in July 2008 during the programme *Top Secret* on the Rete4 channel.

> [3] *www.cicap.org/piemonte/cicap.php?section=indagini_in&content=crop05_corso*.

I will now introduce you to the **first secrets** of circlemaking by giving a few details of this last formation, but I beg you to grant me a little more patience and then I will provide much more information.

The circle for *Top Secret*

In May 2008, the TV programme *Top Secret* (Rete4) asked CICAP to trace a crop circle in front of their cameras in full daylight and without any secret, in order to explain the construction techniques to viewers. After sorting out all the complicated problems involved in organizing these events, on 1 June 2008 I created, together with **Marco Morocutti** and **Nicolas D'Amore** (a magician from Argentina who has consulted for CICAP for many years), a five-point star inscribed substantially in a circle with a diameter of 26 metres. The resulting report was broadcast in the episode dedicated to UFOs on Wednesday 2 July 2008 at 9:10 PM.



The project created for the programme. Illustration by Francesco Grassi.

Looking at the drawing of the formation, its measurements might appear small if compared with those of modern British circles. We already mentioned that the concept of size in the history of circles is relative; moreover, the main goal was to demonstrate the feasibility of circlemaking in a reasonable amount of time for television coverage.

We now explain how it was possible to create that formation. In this manner, with the indications given, the reader will not find it difficult

to extract the main ideas for creating crop circles. However, it should be very clear that entering private property and flattening crops is certainly an illegal practice that can be prosecuted by law. Therefore, I beg anyone who wishes to make this experience to compensate the owner of the field, thus remaining within the boundaries of absolute legality and respect for other people's property.

The formation for *Top Secret* was created in daylight, but creating it at night would have entailed the same sequence of actions. As mentioned, our eyes adapt quickly to darkness and it is truly surprising how it is possible to move with great ease at night in a field of wheat. It needs to be tried to be believed.

The tramlines used to enter the field. Credit: Marco Morocutti.

Anyway, here is a detailed construction timeline:

1. We identified the central point, which we reached by walking along a tramline, and marked it with a numbered flag.

2. We traced the first construction line with our feet (circumference with a radius of 12 metres).

3. We chose randomly the first point of the star and marked it correspondingly with a numbered flag (the star had five points and therefore the points were arranged at the vertices of an imaginary inscribed pentagon).

4. We unwound the tape measure to 14.11 metres and marked with a numbered flag the second point of the star (one person stood at the first flag and the second person walked within the previously traced circumference and identified the point by pulling the tape measure, which was unwound to 14.11 metres).

5. We repeated the preceding action three more times, so as to mark the entire circumference with a radius of 12 metres with five flags all arranged at approximately 14.11 metres (the five vertices of the inscribed regular pentagon).

6. We traced with our feet the circular arc from flag 2 to flag 5, with the centre at flag 1 and a radius of 14.11 metres.

7. We traced with our feet the circular arc from flag 3 to flag 1, with the centre at flag 2 and with a radius of 14.11 metres.

8. We traced with our feet the other three similar circular arcs with a radius of 14.11 metres.

9. We flattened the pentagonal central region with the plank.

10. We flattened the five petals with the plank.

11. We traced with our feet the circumference with a radius of 13 metres.

12. Using the plank, we flattened the annular region delimited by the circumferences having a radius of 12 and 13 metres.

13. We removed the six flags.

As regards step 1, it is essential to reach the central part of the field via a tramline and it is also fundamental to mark in some way the point from which the formation originates. The centre should not be placed exactly at a tramline: this is obvious and cheap. A true circlemaker normally would not do this. Various methods can be used for marking. For this demonstration, we used narrow flags bearing numbers printed in black on a white background and with a sufficiently large font size: they are readable without any problem even at night.

Nicolas acts as the centre pivot at a flag. Credit: Marco Morocutti.

It is important to create the construction lines before flattening the crops with the planks. The lines are traced with one's *feet* because, as anticipated, the **tip of the pencil** in the geometric drawing on paper corresponds to **the foot of the circlemaker** during crop circle creation. The tape measure must be kept well taut between the two people who are tracing, the one who acts as a centre pivot and the one who traces the circumference. The tape measure is usually held against one's chest.

Tracing a construction line with one's feet. Credit: Marco Morocutti.

Once the construction lines have been traced, the areas of vegetation delimited in this way are flattened. This is the *least intelligent* step of the design, but it isn't trivial. It's like one of those "shade in the dotted areas" puzzles.

Flattening is performed with a plank that is placed under one's foot and is retained firmly in one's hands by means of ropes tied to the ends of the plank. Actually, the ways in which this step is performed (flows and directions of the flattening of the plants, resulting superimposed layers, etc.) and any weaving or braiding of the plants performed with one's hands can enhance the formation and give it a further *magical touch*.

The plank in action. Credit: Marco Morocutti.

The cameraman takes a low-angle shot of crop flattening with the plank. Credit: Marco Morocutti.

Decoration with hand-made weave. Credit: Marco Morocutti.

Final step of the weave. Credit: Marco Morocutti.

Flattening a petal. Credit: Marco Morocutti.

The petal begins to take shape. Credit: Marco Morocutti.

The petal is almost finished. Credit: Marco Morocutti.

At this point it is appropriate to make a few remarks regarding the time needed for execution. We created this formation in approximately two hours, but it should be noted that we had not planned any time optimisation. During execution there were in fact many interruptions to record my comments, only a few of which were then used in the programme. Moreover, sometimes it was necessary to record the same comment even several times due to shooting requirements.

A tuft of plants is left intentionally upright inside the petal. Credit: Marco Morocutti.

Marco takes a break. Credit: Marco Morocutti.

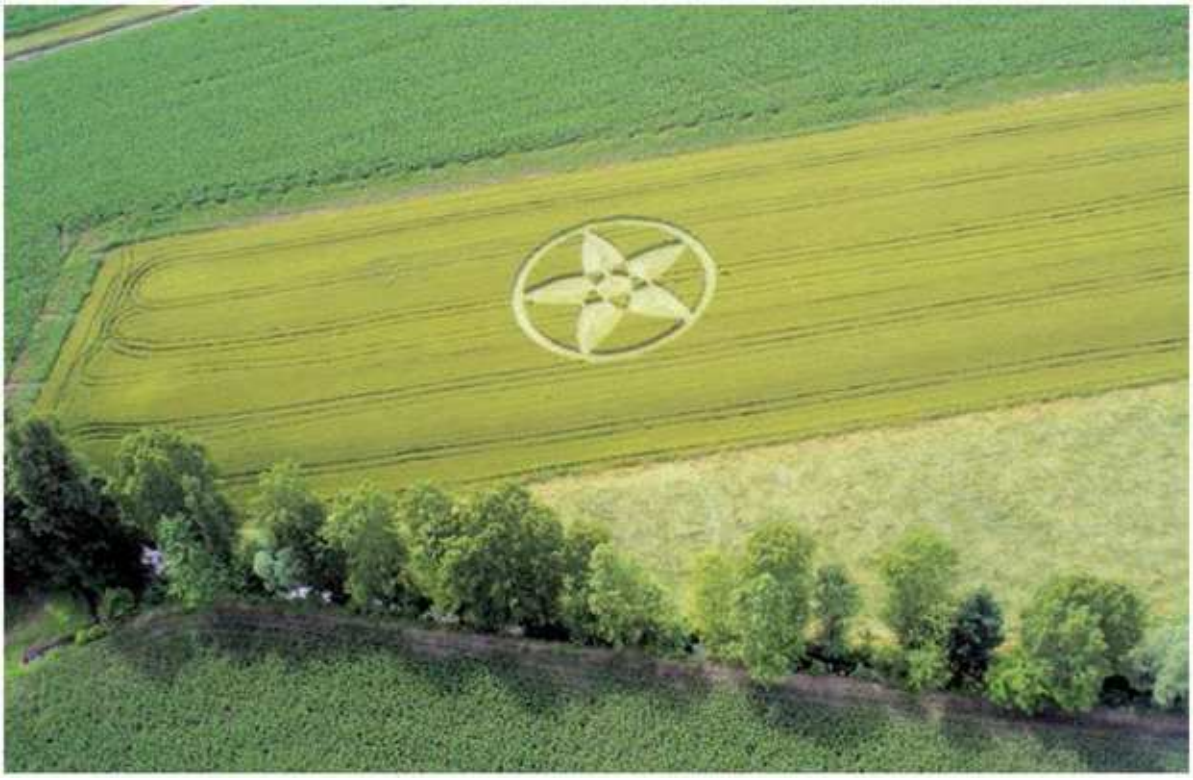
Nicolas takes a break. Credit: Marco Morocutti.

Final questions and answers. Credit: Marco Morocutti.

After tracing the construction lines, the final flattening part (centre, five petals and ring) could have been performed in parallel by the three people of the team, drastically reducing execution in terms of time, but this did not happen.

To allow greater shooting freedom to the camera crew, we flattened the areas one after the other, as if in practice the team in this step consisted of a single person forced to do everything on his own. Had we optimised time in the most correct manner, we could have created the same formation certain in a little over one hour.

Aerial view of the formation. Credit: Marco Morocutti.



A closer view. Credit: Marco Morocutti.

Going to circlemaking school

A red pill to exit from the circle

It's quite normal: at this point some readers are still not yet persuaded that crop circles are man-made. Probably some of you are thinking that a large percentage of crop circles is man-made and the other small percentage of remaining formations is impossible to create and therefore is *genuine*.

Let's stop to think for a moment: it's practically impossible to demonstrate that all the formations that appeared from the beginning of the phenomenon until now are man-made. However, we must be careful, because this argument has an important basic flaw, since it is unfortunately true for **any activity** that we normally ascribe to human beings and that we see every day. Every day we drive our cars on the roads and we encounter hundreds of road signs: who installed them? Would we be able to demonstrate that all those road signs were installed by people like us? Absolutely not; there is no evidence, and if you had to trust your own experiences as an eyewitness, be honest: how many road signs have you actually seen being installed with your own eyes during your lifetime?

This may appear to be a paradoxical example and if one stops to consider it impartially one may find the appropriate analogies, but certainly in the end not everyone will be convinced. I could wrack my brains to try and find other, perhaps more fitting examples, but no matter how I try I will never be able to eliminate the fundamental doubt. To exit from a **maze** you must be aware that you are inside

one; to **exit from the circle** you must be aware that you are a prisoner [4] of **circular reasoning**.

> [4] From a symbolic point of view, it feels appropriate to quote the 1999 cult film *The Matrix: "Do you want to know what it is? The Matrix is everywhere.* [...] *It is the world that has been pulled over your eyes to blind you from the truth.* [...] *That you are a slave, Neo. Like everyone else, you were born into bondage. Into a prison that you cannot taste or see or touch. A prison for your mind."* [Morpheus, *The Matrix* (1999)].

If one wishes to break this vicious circle, there is a solution. The only way to be 100% certain of the human origin of a particular formation, the only way for every one of us to exit from the circle, is to **create the circle ourselves**. But what is the point of creating a formation if it doesn't help us to understand whether all the others were man-made? First of all, becoming a circlemaker (regardless of whether the circles you make are beautiful or ugly) allows you to expand your horizons and knowledge. If nothing else, it helps in understanding whether it is difficult to do something or in dispelling false myths that are constantly disseminated. For example:

– is it true that it is impossible to move around in a field at night in the dark?

– does a full moon make things easier or is it better to avoid it because there is the risk of being spotted easily?

– how long does it take to create a formation?

– how many people are needed?

Furthermore, the other crucial and invaluable aspect of creating your own formation is actually the most important one: the fact of having a **privileged viewpoint** when other people begin to talk about it in newspapers, on TV, on the Internet and so forth:

– **you will know** with absolute certainty who created the circle and how it was created, but **other people will not**.

Before we begin with the basics, however, always bear in mind what we have already made clear: entering private property and flattening other people's crops is certainly an illegal practice. If you want to become a circlemaker, you should plan to behave in a fully legal manner and to respect other people's property. However, let's digress briefly to clarify that the damage caused to the owner of the field by circlemakers is usually modest. If no one entered the field after the formation has been created, the owner would in any case be able to use farm vehicles to gather a significant portion of the flattened crop. The problem begins when the formation becomes publicly known. At that point **thousands** of visitors begin to walk in the field, trampling the plants repeatedly with their feet and ultimately destroying them. This is why it from the very first years British field owners began to respond to this phenomenon by placing so-called ***honesty boxes*** at the entrances to the field: boxes for collecting optional donations from visitors. In my personal experience, however, I noticed that the donation is not actually very *optional*. The minimum fee is normally made quite clear with conspicuous signs and the *absent-minded* visitor is inevitably prompted to make a donation by the owner of the field himself or by a person (a friend or family member) assigned to controlling visitor flow.

A sign suggests the minimum offer before entering the field. Copyright: Francesco Grassi.

Welcome to the
corn circle.
We would welcome
a donation.
THANK YOU R.Z.HUEI + ZONE

An honesty box for collecting donations at Milk Hill, Alton Barnes, Wiltshire, August 2004. Copyright: Andrea Feliziani.

Another reminder before gaining access to the field. Copyright: Francesco Grassi.

After this brief digression, we can go back to circlemaking, with the **first rule** of the circlemaker:

Never disclose that you made your crop circle.

It is a matter of record that formations that are certainly of human origin are ignored systematically by researchers and by believers in the mysterious nature of the phenomenon. This is a consequence of the *Rosenthal effect*, which we already mentioned earlier and will discuss again in the final part of this book. The goal of circlemakers

is the opposite: to make sure that their creation has a life of its own, making people talk about it as much as possible and for a long time through the years.

This having been said, we're now ready for the more practical part.

Basic tools and methods

As in every **art**, even in circlemaking there is a **key rule** that must never be forgotten:

there are no right or wrong methods; there are methods that work for the purpose we seek

Therefore, the tools, recommendations and methods that we will describe should be seen as those that are certainly work and that through the years have been used and tested repeatedly but are not certainly the only ones. Moreover, other creative methods might be devised and used to provide ever more sophisticated or complex formations. Let us try, therefore, to list the basic tools and recommendations that introduce us to the art of circlemaking.

Tools

– **Tape measures** of good quality and strength. We refer in particular more appropriately to surveyor's tape measures, since they can be rewound easily after use. Their maximum length must be considered with reference to the data of the formation that we have traced on paper. For example, if we want to create a circle with a 20-metre radius, then a 10-metre tape measure is obviously insufficient.

– **Systems for marking** key points on the ground. All formations, even simple ones, require points that must be easily found at night

and perhaps need be used as starting points to enhance the formation. Small, very slender poles with a **flag** at their top, bearing a number written in large characters in **black on a white background**, work very well. When the small poles (a compromise will have to be made between strength and diameter) are removed, you should take care not to leave clear signs of the small holes made in the ground. As an alternative, circular or square or otherwise shaped “tiles”, also white with the number written in black, to be placed on the ground, work just as well, but you must take care not to displace them with your feet while creating the formation.

– **Wood boards or planks** (also known as *stompers*) with a rope fixed to the two edges, so as to keep the boards under your foot while flattening the crops. The longer the board, the wider the strip of plants that it can flatten, thus allowing potentially to save time. You will have to find a compromise between portability and desired size, depending on the amount of area to be flattened. Boards measuring about 1 metre in length are normally used. Width, too, is important. If the boards are too wide, they are cumbersome; if they are too slender, they risk damaging the plants considerably. Boards approximately 16 centimetres wide will do fine. Moreover, a thickness of a couple of centimetres gives the board reasonable weight without being excessive. The length of the rope fixed to the board must be such that it can be gripped easily. It is preferable to make it slightly longer so that it can be adapted to your height.

– **Your feet** are the **pencil tip**. To trace perfect edges it is important to use your feet and step sideways. It doesn’t matter whether you want to create circular lines or straight lines: your feet are always the best tool. If you’re thinking of using the boards directly to create an edge, bear in mind that the edge will never be as clear-cut as an edge made with your feet.

Recommendations

– A formation is not improvised on the field: it has to be drawn and studied beforehand as much as possible and in great detail. Everything that can be planned in advance must be planned in advance.

– The tools must be easy to carry in a car and in any case must be lightweight, easy to handle and not too bulky. Bear in mind that the tools must in any case be carried to the field and then carried back to the car.

– Everything that is brought into the field must be taken away. Set up key locations in the field where bags, backpacks and various materials will be placed, because at night it isn't easy to see something left unattended by mistake.

– Avoid damaging the crops as much as possible.

– Choose the field in advance; study the strategic and geographical location, where to park, any access difficulties and especially usable dimensions. Don't find out once you're in the field that the dimensions of the formation you planned on paper are too large for the usable area of the field.

– Calculate in advance how many useful hours of darkness you will have, based on sunset and sunrise times at the geographical location and on the date of execution.

– Always bear in mind that in the real world measurements can be different from those on paper. You must learn to manage errors introduced by the *tip of the pencil*, which after all is 30-40 centimetres wide, by the tension of the tape measures, by the slope of the ground and so forth. Of course, you will have to try to minimize any errors that may be introduced.

How to create a circle with two people

– The main geometric figure is, of course, the **circle**. To become a circlemaker, first of all you must learn to deal with this basic figure. Creating a circle requires a single measurement: the **radius**.

– Once the radius of the circle has been decided, you enter the field taking care to use one of the tramlines that normally should be present, also because you chose the field with this in mind. If there are no tramlines, you must try to enter the field with high steps and avoid proceeding in a straight line for too long; you should also return upright with your hands or other means (for example the wood board used for flattening) any the plant that have been partly flattened by your passage.

– It is considered bad form to place the centre of the circle exactly at the tramline. Therefore, the person who acts as the centre should enter the crop for one or two metres in order to position the centre.

– While tracing the circumference, the person at the centre will end up turning in place. He or she might damage the surrounding crops and therefore should of course try to minimize such damage. Anyway, bear in mind that the area will in any case be flattened and therefore any damage will be hidden by the plants. Moreover, it is not necessary to make the geometric centre coincide exactly with the centre of the flattened area.

– The person who traces the circumference will stand within the tramline after the person who acts as centre has decided his or her own position. Unwinding the tape measure according to the desired length of the radius, he or she will begins sidestepping to flatten the crops with his or her feet, taking care to keep the tape measure well taut, usually by keeping it pressed against the chest.

– Once the circumference has been completed, it is possible to flatten the area delimited by the circular trace by using the board, starting from the outside and proceeding inward or vice versa.

How to create a circle on your own

– No tape measure is needed to create a circle on your own; the board alone is enough.

– Begin by creating a small circle [5] with a radius equal to the length of the board.

> [5] francescograssi.blogspot.it/2009/11/cerchi-nel-grano-un-uomo-armato-di-una.html.

– Keeping one end of the board substantially on the same spot of the ground (the right end if you turn clockwise, the left end if you turn counterclockwise), turn the board around the centre you have chosen.

– Once you have traced the first circle, you can widen the formation progressively in increments that are always equal to the length of the board.

– You can repeat this process several times, ultimately obtaining large circumferences with a radius that is evidently a multiple of the length of the plank.

– Clearly, precision will begin to fade if you're not expert enough and if you increase the radius considerably, accumulating errors that may become evident when the formation is seen from above.

– However, this is a very quick technique that can be useful for tracing relatively small circles in a very short time.

Inscribing a hexagon (how to trace straight lines)

– You need six position-marking poles, a tape measure, the value of the radius and at least three people.

– The hexagon is the easiest geometric figure to draw once the basic circumference has been traced.

– The length of its side **coincides** with the **radius** of the circumference. This is why you must place each one of the six poles (inside the traced circumference) at a distance **equal to the radius** from the following one and the preceding one.

– Tracing the sides of the hexagon requires three people.

– After locating the two points that constitute the ends of the segment to be traced (the two poles that mark two consecutive vertices of the hexagon), two people move to these to points, keeping the tape measure properly taut (just above the level of the crop) so that it traces a straight line.

– At this point the third person traces the segment by walking, once again with sideways steps, along the straight line traced by the tape measure.

– Once this process has been repeated for each side of the hexagon, the result is a hexagon perfectly inscribed within the circumference.

– To complete the exercise, you might flatten the entire area inside the hexagon.

Inscribing a square or other geometrical figures

– Leaving aside the hexagon (the only case in which the length of the side coincides with the radius), all the other polygons entail calculating the length of the side before placing the position-marking poles at the vertices.

– Therefore, to calculate the length of the side of a generic polygon that can be inscribed in a circumference having a known radius it is generally convenient to use CAD software. Computer programs of this kind are helpful during drawing, since they calculate automatically the measurements that will be needed later during actual circlemaking.

– If this kind of software is not available, it is possible to use basic mathematical formulae at least in the simplest cases [6].

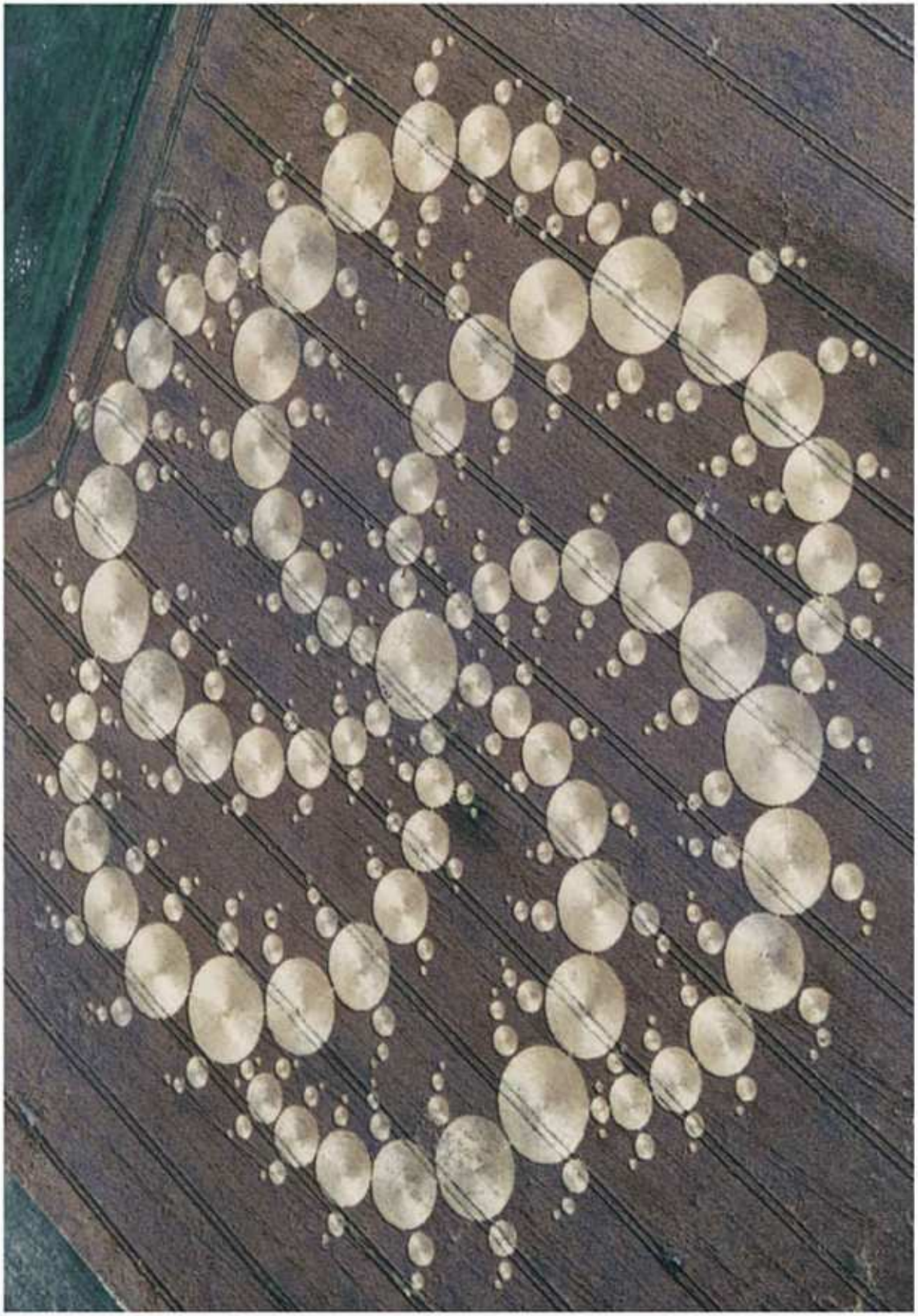
[6] www.mathopenref.com/polygonsides.html.

– Once the length of the side of the polygon to be inscribed is known, the entire process to be performed in the field is exactly equivalent to the case of the hexagon.

– You must take into account the fact that the measurements on the field will never match perfectly the theoretical ones on paper and therefore any errors will have to be managed on site during work.

Complexity from simplicity: Milk Hill, 2001

The Milk Hill formation, which appeared in August 2001, is familiar even to the most distracted spectators of the crop circle phenomenon. It usually gets mentioned to argue that it is impossible to make because of its inherent complexity and because of the size of the area that it covers.



The Milk Hill formation of 2001. Copyright: Andrea Feliziani.

Without decoding tools, the view of that enormous number of large and small circles, arranged with that harmonious logic, is obviously disconcerting and perplexing for anyone.

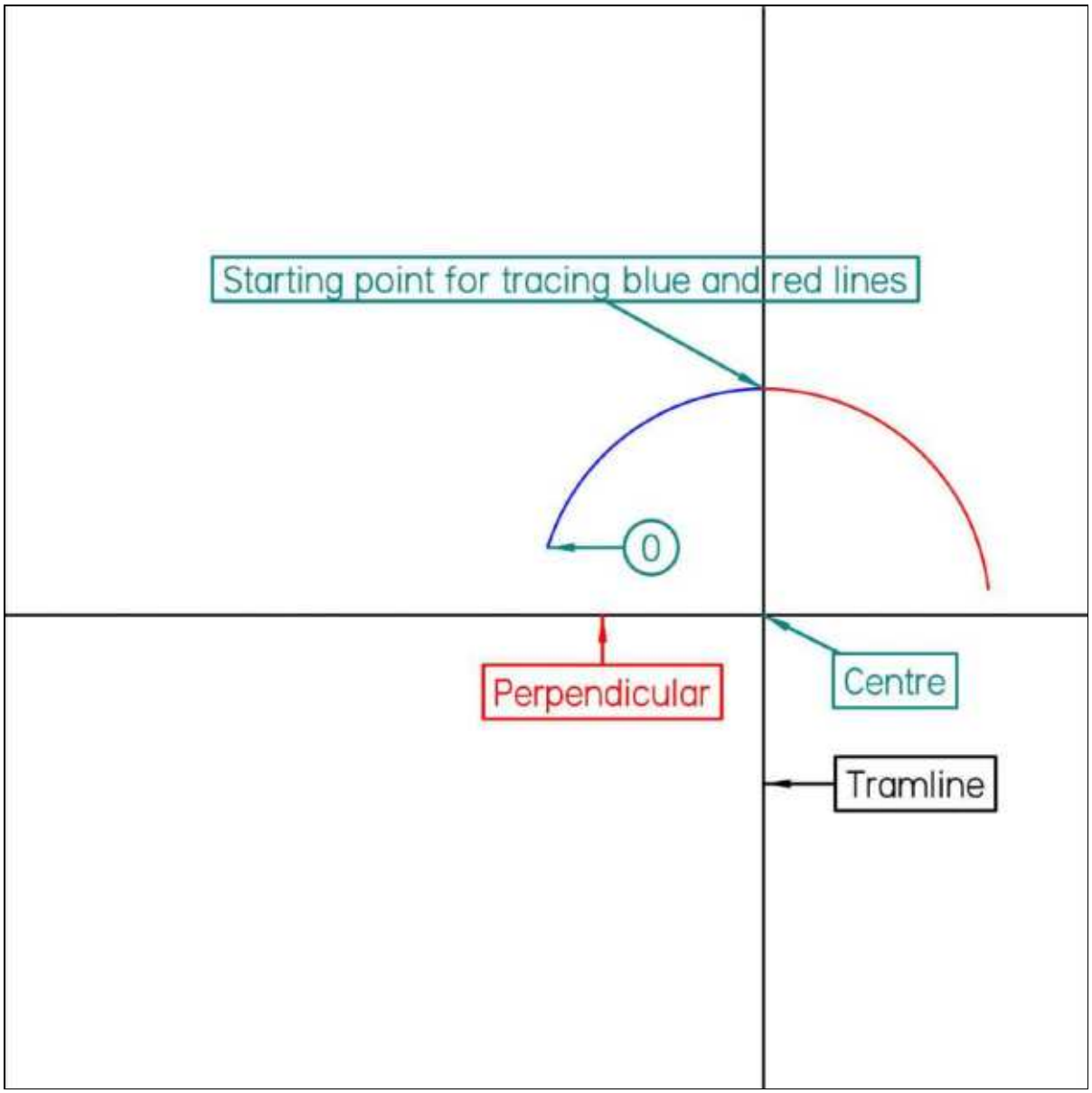
Could this formation be man-made? If so, how could it be made?

Since you've just finished a brief lesson on circlemaking, you may make a few guesses. Probably, if you review the basic methods described in the preceding pages, you might think that the technique required for a man-made construction of Milk Hill 2001 is not listed. Yet it actually is: the key is, very simply, the main method for tracing one circle with two people. The old method devised by Doug and Dave. Let's try to continue this line of reasoning by imagining two people entering a field of suitable size via a tramline and deciding to use a rope (a fixed distance) measuring **10 metres**.

By placing a first centre on the tramline and moving to the distance of 10 metres determined by the rope it is possible, therefore, to trace a circular arc by proceeding counterclockwise and stopping before (it doesn't matter exactly how much before, for reasons that will become evident later) reaching the imaginary line that passes through the centre and lies at right angles to the tramline. The stopping point is important and must be identifiable later. We mark it with the numeral 0; it will be the centre of the structure that will take shape.

The circlemaker who traced this first part of the arc goes back to the starting point in the tramline and does the same thing in a mirror-symmetrical manner, tracing this time the second part of the arc clockwise. In this way he or she reaches a position that is symmetrical (relative to the tramline) to the previously marked 0 point, or he or she can proceed slightly further toward the imaginary line that is perpendicular to the tramline. The reason for this will

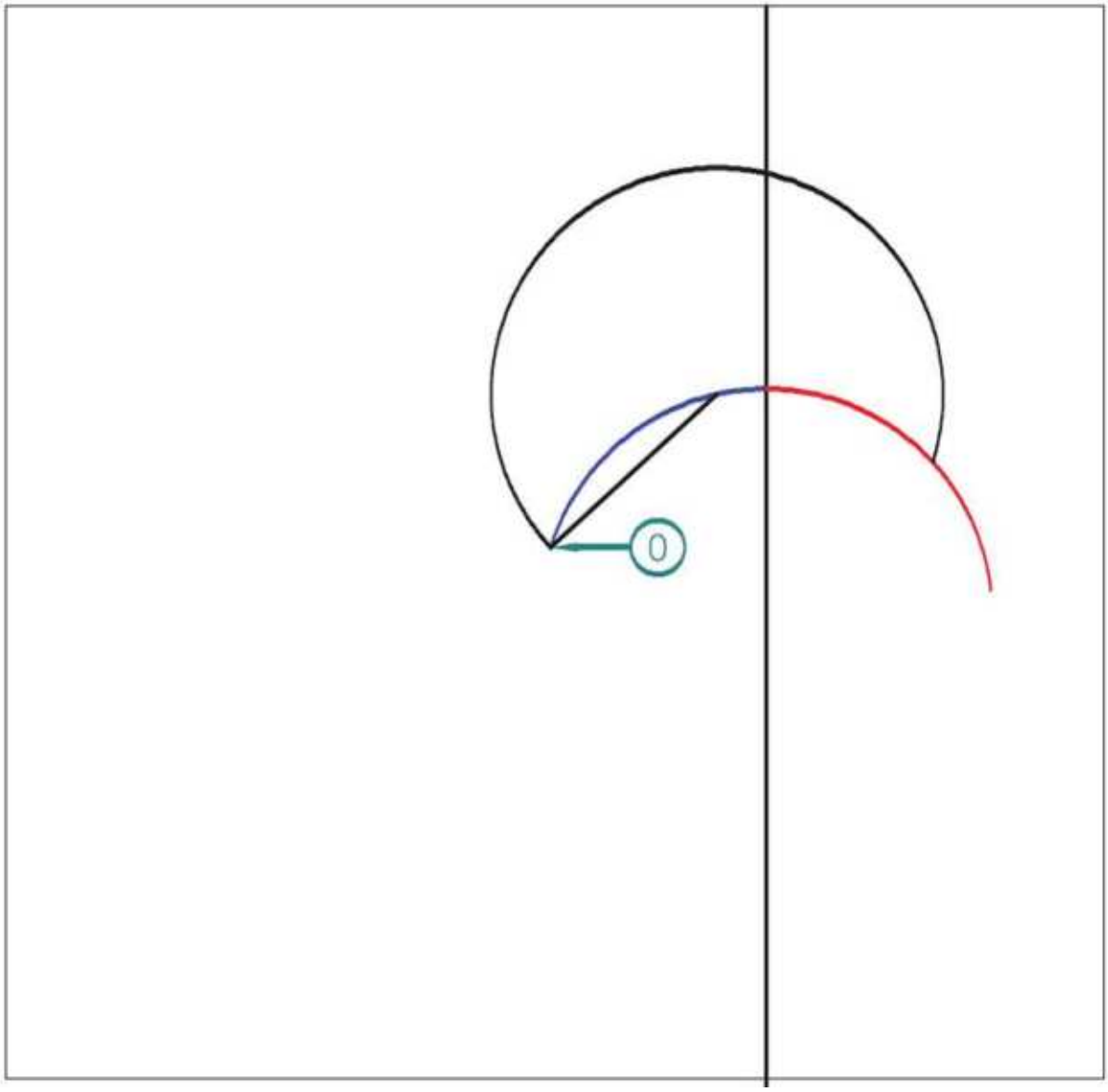
become apparent later and it is not important, for now, to be too precise in defining how far one must go in tracing this arc portion. What matters is that the basic idea is understood.



The blue arc is traced counterclockwise. After returning to the tramline, the red arc is traced clockwise. Illustration by Francesco Grassi.

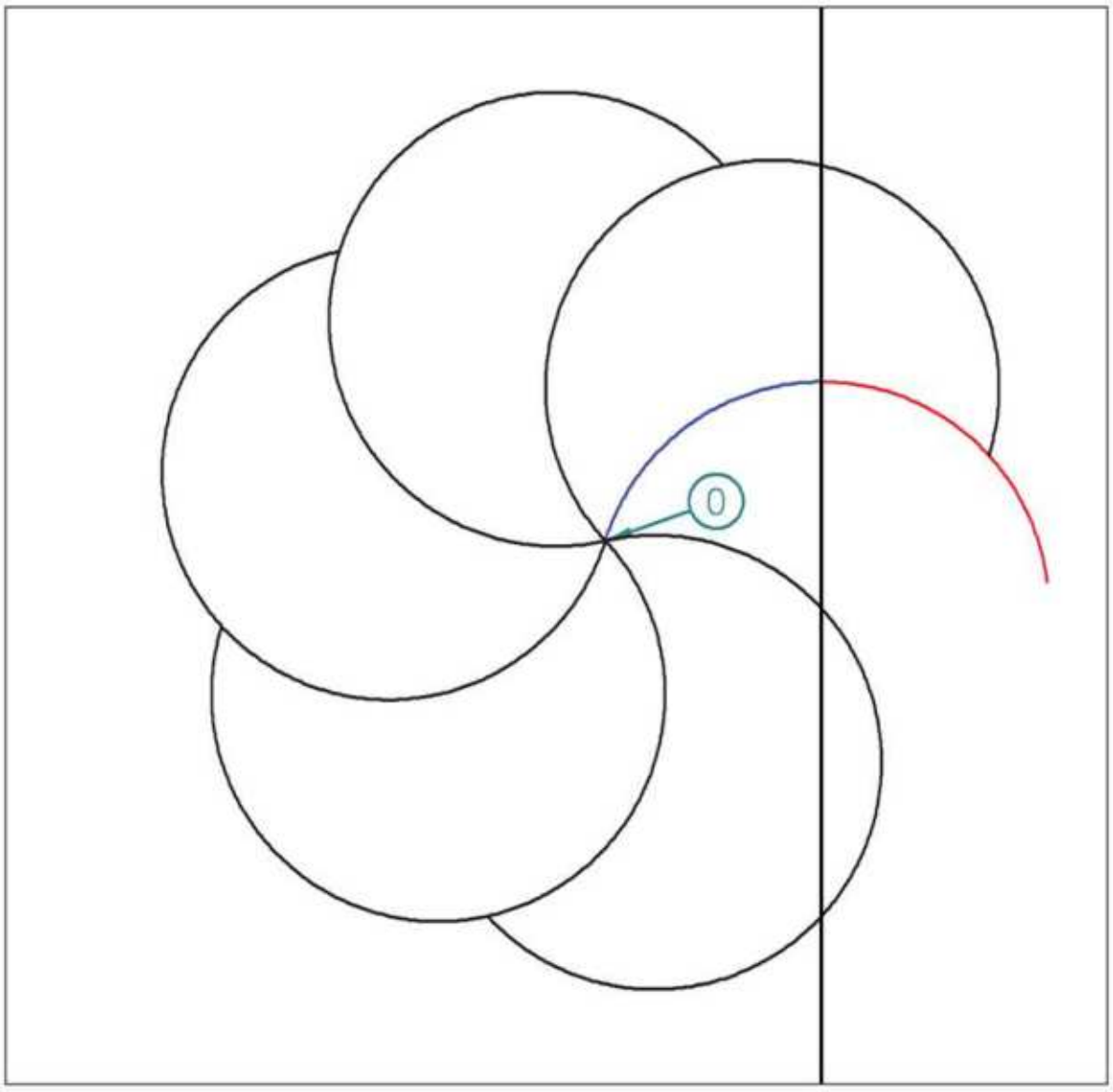
After doing this, the same circlemaker returns to the point that he marked with the numeral 0 and waits for his or her partner – acting

again as a centre – to stand again at the preset distance of 10 metres inside the same arc. At this point a second arc is traced clockwise and the path ends when the line of the first traced arc is reached.



Starting from point 0 of the blue arc and continuing clockwise with the set radius, at a certain point one reaches the red arc. Illustration by Francesco Grassi.

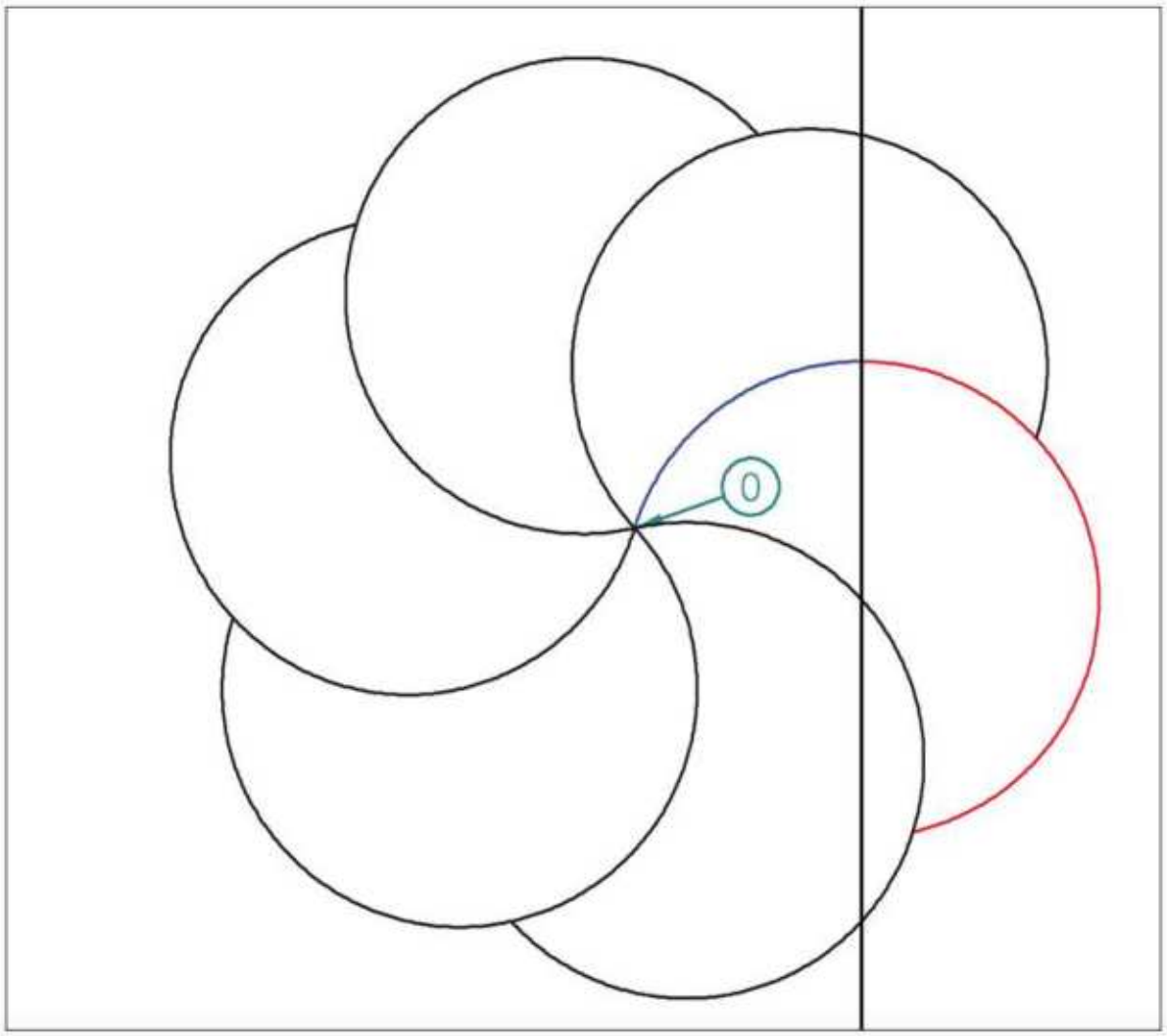
The method should now be clear. These steps need to be repeated four more times exactly identically, moving in each instance along the previously traced arc.



Repeating the process four more times produces the almost complete figure. Illustration by Francesco Grassi.

In the end we obtain a figure constituted by six arcs. The figure is almost complete because the part of the first arc that we left

unfinished is missing. It is now clear why we proceeded in this way. Therefore, we return to the initial position and trace the small portion of the arc, ending our path by connecting the first traced arc to the sixth one.

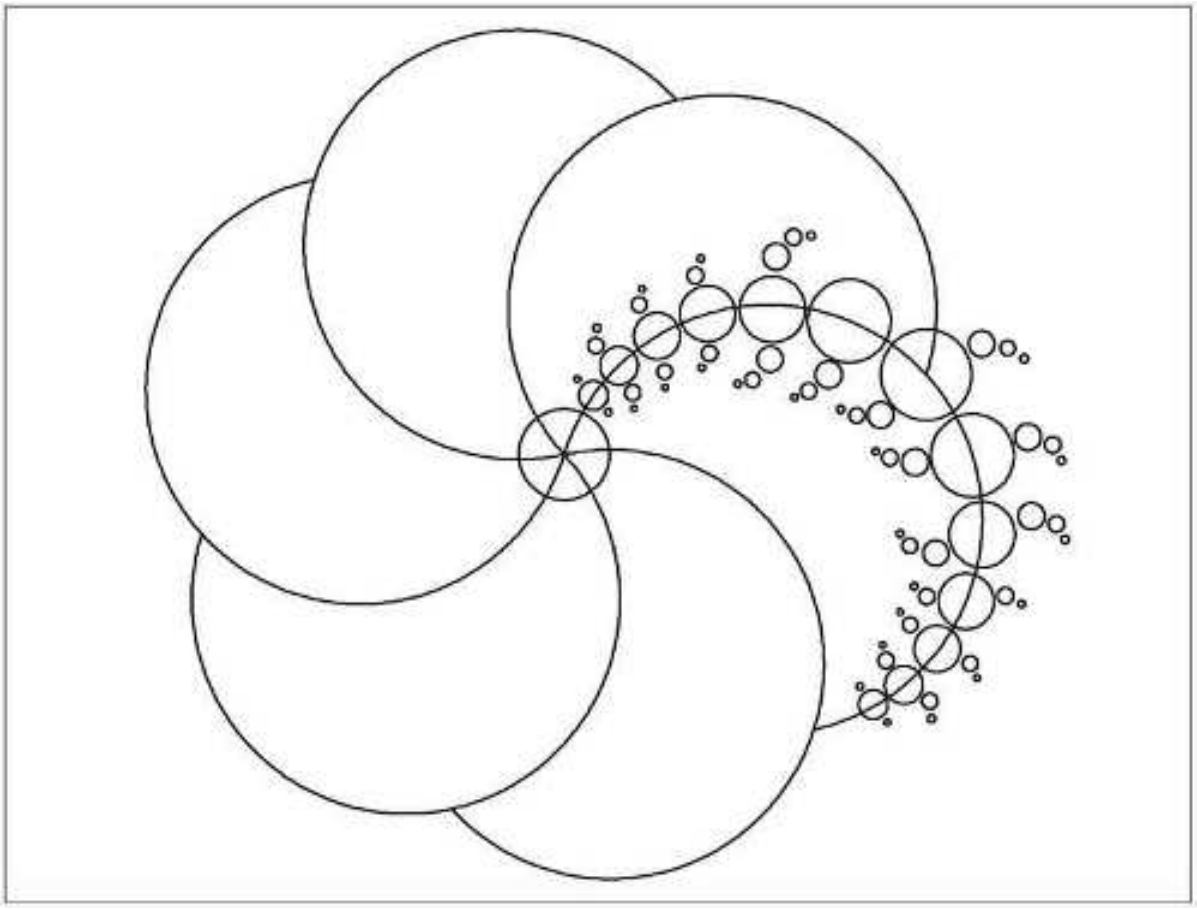


After tracing the missing part of the red arc, the complete structure formed by six arcs is obtained. Illustration by Francesco Grassi.

I hope that at this point you've noticed the analogy between the figure you have just traced in the field and the Milk Hill formation of 2001. The latter contains an enormous number of circles of various sizes, all located on a six-arc structure that is similar to the one that

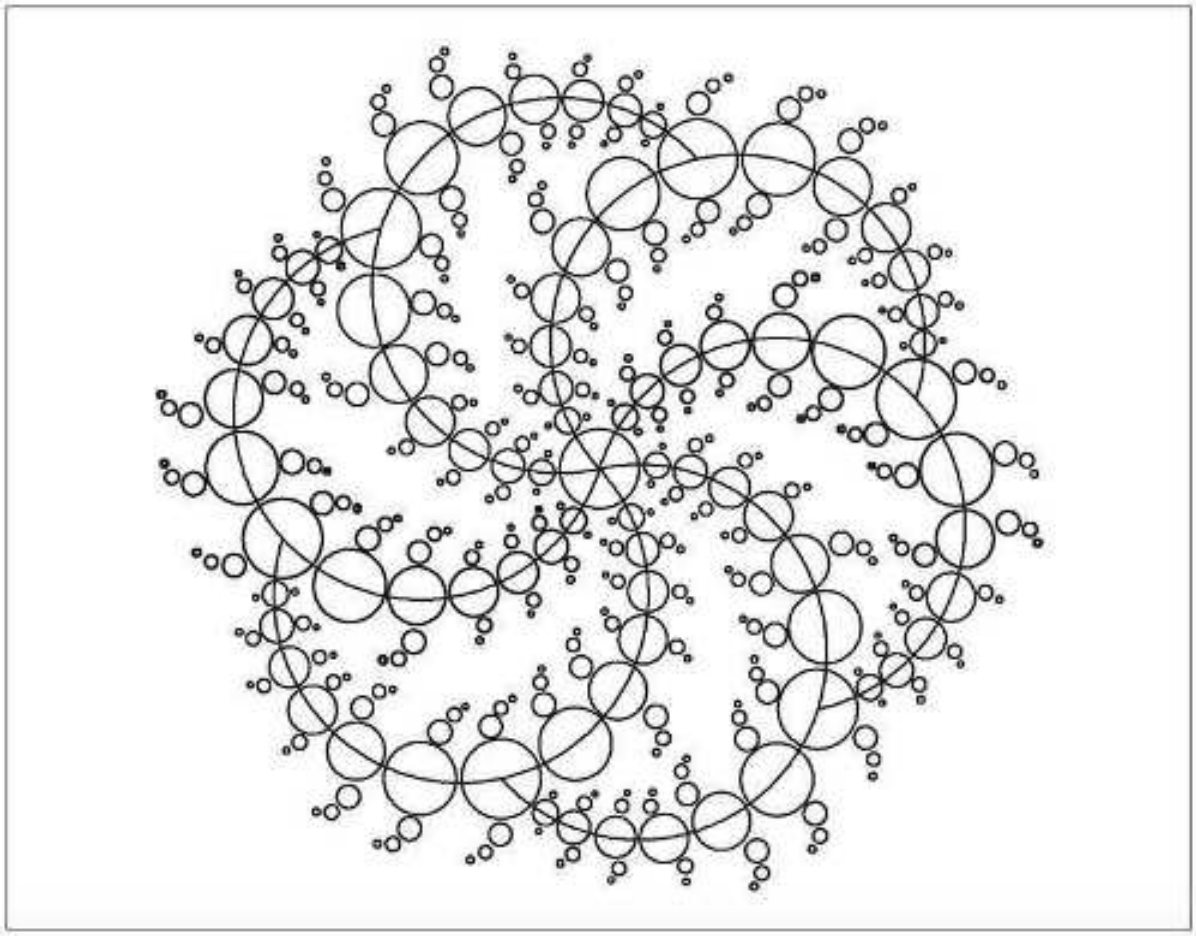
we just constructed. Our figure was based on a 10-metre rope and therefore the total extension of the complete figure composed of the six arcs can be obtained by multiplying by four the base measurement: a circular area with a diameter of approximately 40 metres.

The Milk Hill 2001 formation, however, is much larger: over 250 metres. Is it feasible? Certainly: the method followed with the 10-metre rope can be repeated with any measurement and works every time. Regardless of the initial base measurement, you always obtain six arcs arranged in that way, with a progressively larger total extension. The size of the Milk Hill 2001 formation requires a rope measuring 60 to 70 metres, leading to a total diameter of 240 to 280 metres. Once the basic structure has been obtained, therefore, the next step is to create the circles (having appropriately preset radiuses), placing their centres on the lines of the six arcs.



The centres of the main circles are on the lines of the six arcs. The arrangement of the circles on each arc is absolutely identical. Illustration by Francesco Grassi.

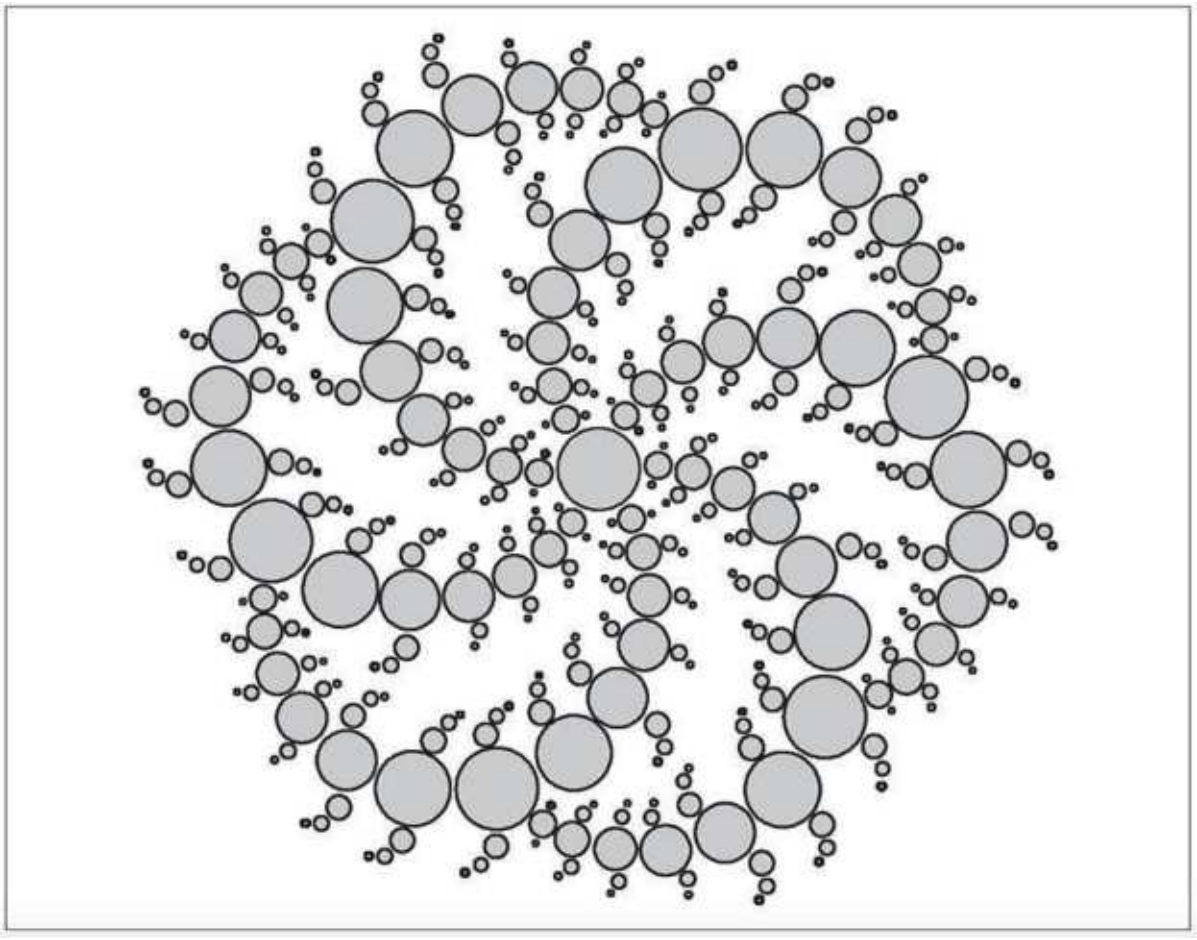
It is important to note that the arrangement of the circles on each arc is absolutely identical. This brings up another concept that is fundamental for understanding the time required to make a formation: the distinction between **serial** work and **parallel** work. The old joke that nine pregnant women won't make a baby in one month summarises this concept perfectly. Pregnancy is an inherently serial process: it can be performed exclusively by one woman at a time and it cannot be *parallelised*. In other words, it cannot be assigned simultaneously to more than one person in order to save time. However, many other human activities can be performed concurrently by several people, and this is the approach used in creating Milk Hill 2001.



Each one of the six arcs has the same number of circles in the same positions. Illustration by Francesco Grassi.

Work on each arc can in fact be seen as an independent activity that is not connected to the work on the other five. If it takes, say, two circlemakers and three or four hours to create all the circles on a single arc, then by using twelve circlemakers simultaneously (two for each arc) the entire work on the six arcs can still be completed in parallel in three or four hours.

Actually, the first phase, i.e., the creation of the six arcs, also can be optimised with this approach. For example, while the first two circlemakers begin to trace the first arc, two others can begin tracing the second one once the point marked 0 has been set, and so forth.



Once the areas inside the circumferences have been flattened, the lines of the six arcs disappear under the plants. Illustration by Francesco Grassi.

This example is very important because it clarifies two fundamental concepts:

– great complexity can emerge unexpectedly from simplicity;

– anyone who thinks that a given formation cannot be made by other human beings should simply admit that he or she lacks the tools to understand and deduce a given construction approach instead of making uncompromising statements.

To conclude, this is not merely a theoretical analysis. The Milk Hill 2001 formation was actually made using these principles, since all

the circles contain underlying traces that join their centres: the traces of the six arcs that were created as a basic structure.

This is demonstrated by looking carefully at the photograph of the formation: the six arcs can still be glimpsed and there is also photographic or video evidence [7] taken from ground level that bears witness to this.

[7] francescograssi.blogspot.it/2008/08/cerchi-nel-grano-milk-hill-2001.html.

It should be noted that it was indeed the discovery of these underlying traces (construction lines) that convinced Ken Brown of the human origin of crop circles.

Let's design some crop circles

We now propose a few exercises that become progressively more challenging but are achievable with the degree of knowledge that you have reached so far. The goal is to give an idea of what it means to design on paper shapes that might then be created in a field, without however expecting the resulting formations to be beautiful or stylistically pleasant. One possible solution for each exercise is provided in Appendix F.

For the proposed exercises, we assume the following:

– all the measurements given in the illustrations are in metres;

– the grey areas are the crop areas to be flattened;

– any dashes indicate potential construction lines that might remain concealed beneath the main flattening;

– one or more measuring tapes can be used;

– in other words, you can rely only on the main tools described earlier (circlemakers, tape measures, marking systems and planks).

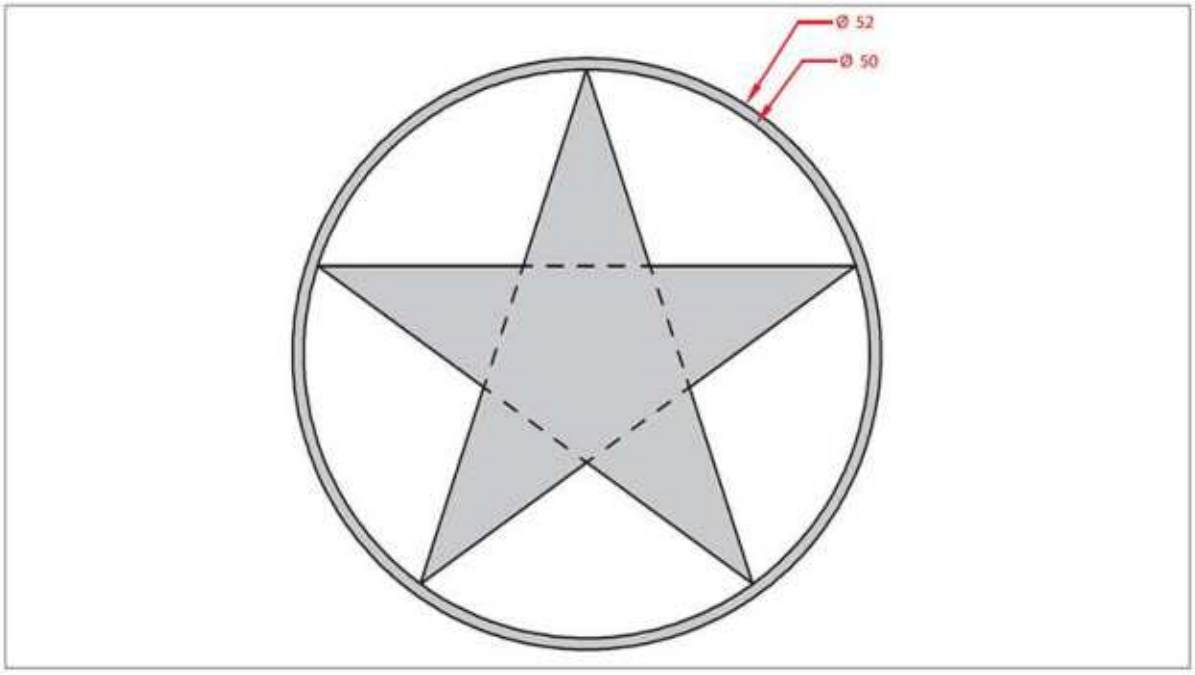
Exercise 1: Draw a star

The challenge:

– Plan and describe the steps required to create the proposed formation.

– Indicate the measurements required, if not provided.

– Indicate the minimum number of circlemakers to use.



Exercise 1: a star. Illustration by Francesco Grassi.

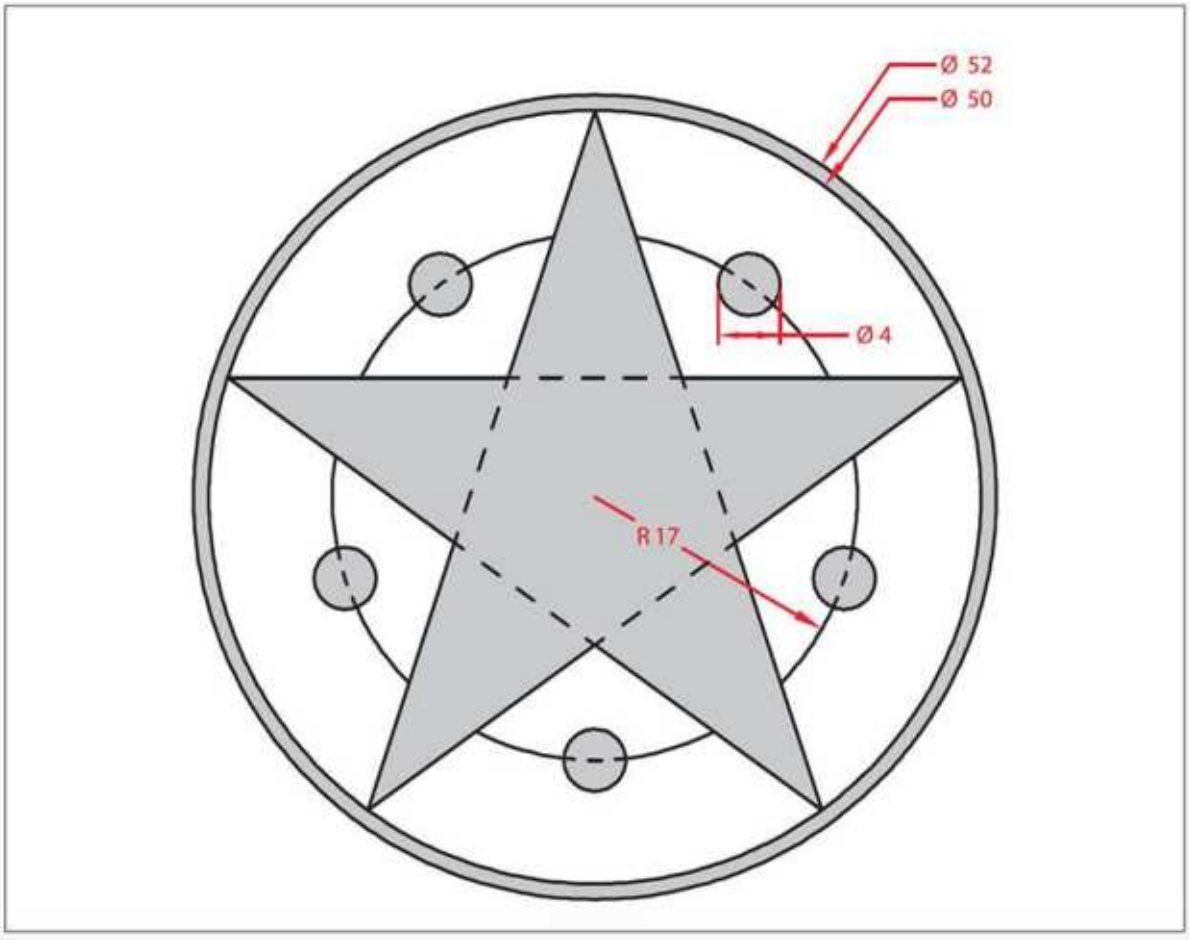
Exercise 2: Draw a star embellished with five satellites

The challenge:

– Plan and describe the steps required to create the proposed formation.

– Indicate the measurements required, if not provided.

– Indicate the minimum number of circlemakers to use.



Exercise 2: a star embellished with five satellites. Illustration by Francesco Grassi.

Exercise 3: Draw a circumscribed square

This exercise requires some inventiveness on the part of the fledgling circlemaker. An effective and pragmatic method must be

devised in order to trace the sides of the square, using what is known as *lateral thinking* [8].

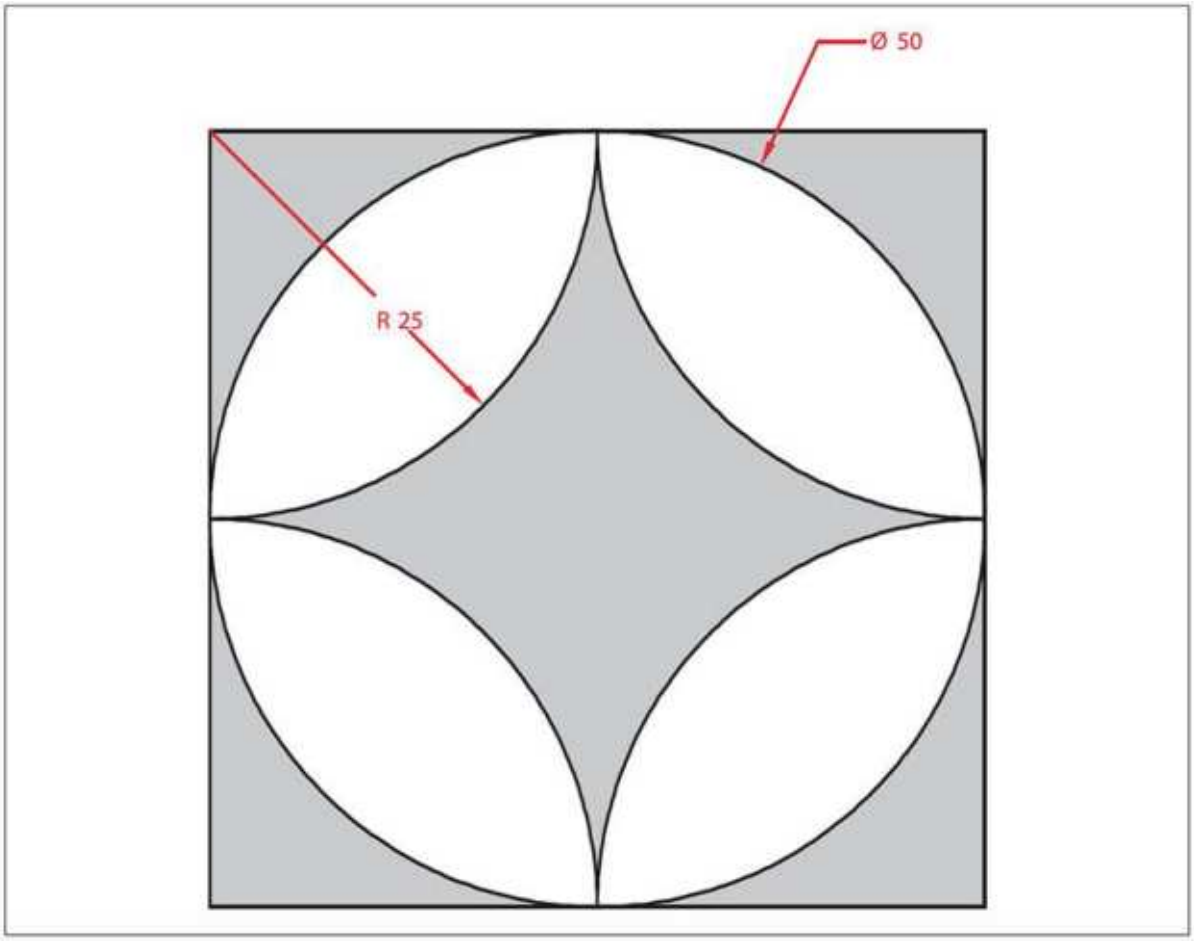
[8] https://en.wikipedia.org/wiki/Lateral_thinking.

The challenge:

– Plan and describe the steps required to create the proposed formation.

– Indicate the measurements required, if not provided.

– Indicate the minimum number of circlemakers to use.



Exercise 3: a circumscribed square. Illustration by Francesco Grassi.

Exercise 4: Draw an internal square

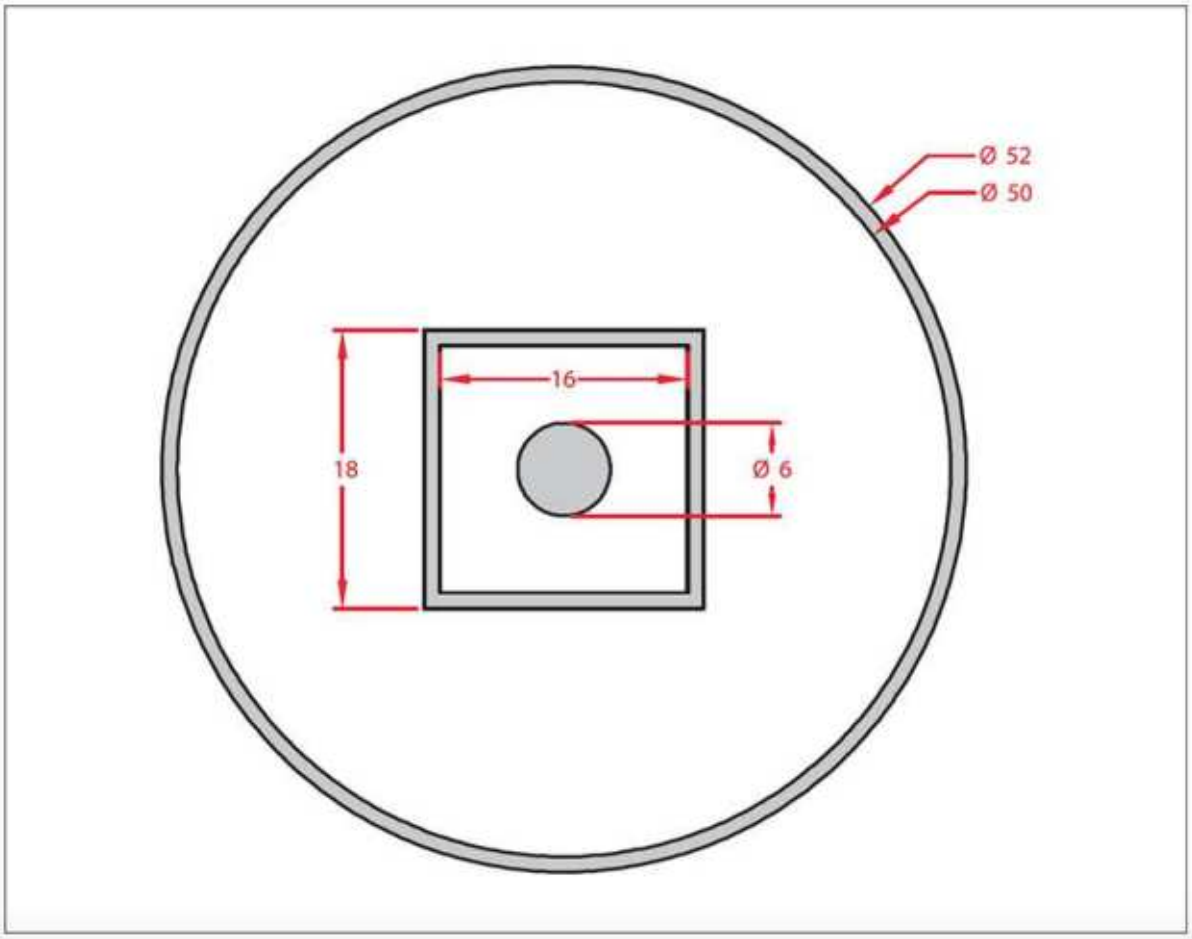
In this case the difficulty lies in the fact that the figure to be drawn is not inscribed. Also, bear in mind that the tramlines are available for walking around.

The challenge:

– Plan and describe the steps required to create the proposed formation.

– Indicate the measurements required, if not provided.

– Indicate the minimum number of circlemakers to use.



Exercise 4: internal square. Illustration by Francesco Grassi.

Exercise 5: Draw an internal pentagon with embellishments

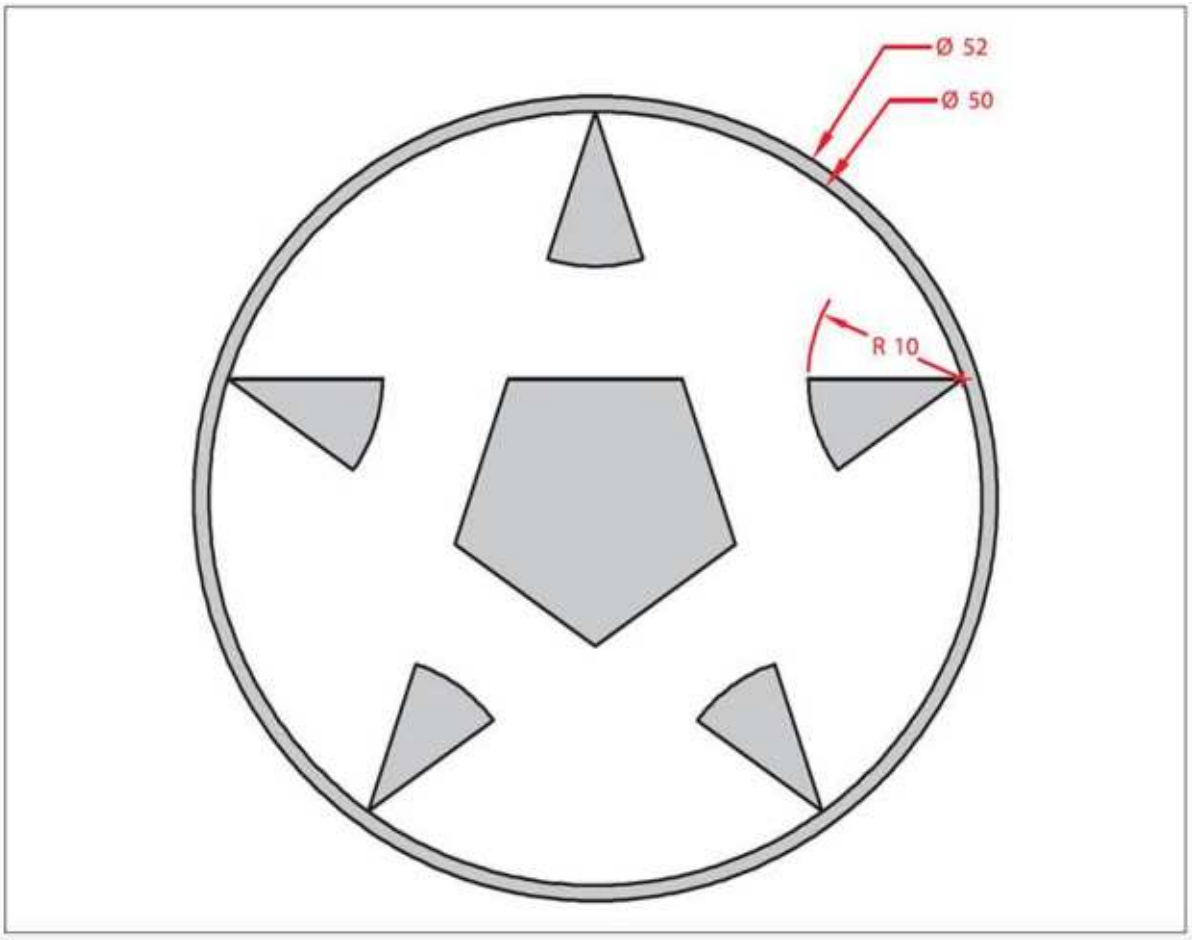
This last exercise requires a little extra creative effort.

The challenge:

– Plan and describe the steps required to create the proposed formation.

– Indicate the measurements required, if not provided.

– Indicate the minimum number of circlemakers to use.



Exercise 5: an internal pentagon with embellishments. Illustration by Francesco Grassi.

The aliens are us

You have almost completed the final step of this book. Now you know the real history of crop circles and you can trace the cited sources by following the event timeline. You know the *light side* of the phenomenon, since you have acquired information received through the media and you can go to Wiltshire, in England, to play the part of *croppies* by visiting the British formations, as well as the Italian ones, if they are near you.

You also know the *dark side* of the phenomenon, to the extent to which I have presented it to you, and you know the basics of circlemaking. But most of you lack one thing: knowledge of what other people don't know, i.e., what it means to be the keeper of a secret related to crop circles. This is a gift I would like to offer to you, although it goes against the first rule of circlemakers.

I am about to reveal a secret that you can keep and use for your musings on crop circles. I am about to tell you the true story of a crop circle and of the associated reactions of the planet-wide community of believers.

Genesis of the experiment

Ever since I started studying crop circles, I never had the goal of debunking the phenomenon. Quite the contrary: I have always sought to analyse and expose, if possible, all of its aspects, in order to decode it in a constructive manner and present the results of my studies with the utmost respect for the sensitivities of the people involved.

I have never restricted my observations to the *light side*; rather, I have had, from the outset, the approach of an anthropologist who has endeavoured to become an integral part of this incredible phenomenon by also reporting what happens on its *dark side*, where the human factor has a more than dominant role.

The scientific method uses an experimental mode that is very important when one seeks to prevent the human factor from compromising the end results of an experiment, which should be as objective as possible. This mode is known as ***blind study***.

Using a blind study is essential to avoid the *Rosenthal effect*, which we have witnessed many times in this book. It takes its name from social psychologist Robert Rosenthal, who studied extensively how experimenters and test subjects can distort the end results of an experiment due to their convictions and expectations regarding the results, and is also known as *observer-expectancy effect* [9]. If the researcher (Pat Delgado, Colin Andrews, Terence Meaden, anyone, including yourself) **knows** that he is examining a crop circle that is certainly man-made, then his analysis will find a thousand ways to provide evidence supporting the fact that *"it is clearly visible that that formation has a human origin".*

[9] *https://en.wikipedia.org/wiki/Observer-expectancy_effect*.

Vice versa, if he **does not know** that he is observing a man-made formation (i.e., he is ***blind*** to this information), then certainly his opinion will be more objective in assessing the alleged *genuineness* or not of that formation. To put it another way, all this allows us to understand whether this ability to discriminate really exists and, if it does not, provides the basis for drawing the appropriate conclusions.

However, the *trouble* with crop circles is that only the circlemakers who created a given formation know its origin with absolute certainty; the other spectators of the *match* are unaware and certainly cannot draw conclusions. Indeed, they can only trust what they are told by

the media or they can become amateur researchers, going in the field and ultimately confirming their own convictions subjectively.

The only way that is left to perform a valid scientific experiment, taking into account all these aspects, is to have someone create a formation without revealing that he or she is its creator and report the reactions of the community. This is what I did, and this is the story of how I did it.

Inspiration: Sitchin, Nibiru and 2012

While I was thinking how to set up the formation that would be the subject of this experiment, I searched for inspiration several times and one discussion among friends in May 2011 caught my attention in particular. The topic was the then future date of 21 December 2012 and the legend regarding the alleged planet ***Nibiru***, based on the personal interpretations of Babylonian inscriptions by the writer **Zecharia Sitchin** [10]. All this sounded like a good source of inspiration.

> [10] *en.wikipedia.org/wiki/Nibiru_cataclysm; en.wikipedia.org/wiki/Zecharia_Sitchin.*

Sitchin's idea is based on the hypothesis that **life on Earth** was influenced by an alleged extraterrestrial civilisation, the ***Anunnaki [11],*** who indeed came from the planet Nibiru and have been visiting Earth since antiquity to exploit its mining resources.

> [11] *en.wikipedia.org/wiki/Anunnaki.*

According to sources connected to Sitchin, when Nibiru was closest to Earth along its own orbit an expedition of **extraterrestrials** guided by ***Enki*** [12] visited some chosen sites: the Nile Valley, the Indus Valley and Mesopotamia.

> [12] *en.wikipedia.org/wiki/Enki.*

Speculation spread over the Internet in recent years also hinted that Nibiru itself would destroy the Earth in 2012. This legend therefore blended with the other modern myth that claims that **21 December 2012** [13] is a key date for an epochal but unspecified change, based on fanciful interpretations of the **Mayan calendar**.

[13] *en.wikipedia.org/wiki/2012_phenomenon*.

Going back to the Anunnaki, the extraterrestrial called Enki is actually a god in Sumerian mythology. He was also known in a later period as ***Ea*** in Babylonian mythology and is also linked to certain myths, such as the creation of mankind, the mixing of tongues and the Flood.

In Sumerian mythology, and later in Assiro-Babylonian mythology, there were **seven** main Anunnaki: An, Enlil, Enki, Ninhursag, Inanna, Utu and Nanna. Ancient Sumerians also divided the sky into seven sectors, dedicating one to each of the seven main Anunnaki, including Enki, to measure the precession of the equinoxes.

I decided that I had more than enough material and that the formation for the *blind study* would therefore be based on the **numeral 7** and would have to contain, in a somehow encrypted form, the name *Enki*.

Planning and steps of construction

Actually, as I followed up on the idea of the numeral 7 I decided that I would use the length of the name of the extraterrestrial/god, writing it as ***Enki Ea*****;** this would allow me to link the numeral 7 to the seven characters of the string *“Enki Ea”*, with the space character comprised between the two words:

– Character 1 = E

– Character 2 = n

– Character 3 = k

– Character 4 = i

– Character 5 = (*space*)

– Character 6 = E

– Character 7 = a

I also relied on a well-established tradition, among circlemakers, of resorting to **ASCII** [14] encoding to express letters within formations and therefore I decided to convert the seven characters into a sequence of eight **bits***,* i.e., a sequence consisting of 1's and 0's according to the ASCII rules.

[14] *en.wikipedia.org/wiki/ASCII*.

These are the seven 8-bit binary sequences I identified:

– 01000101 = E

– 01101110 = n

– 01101011 = k

– 01101001 = i

– 00100000 = *(space)*

– 01000101 = E

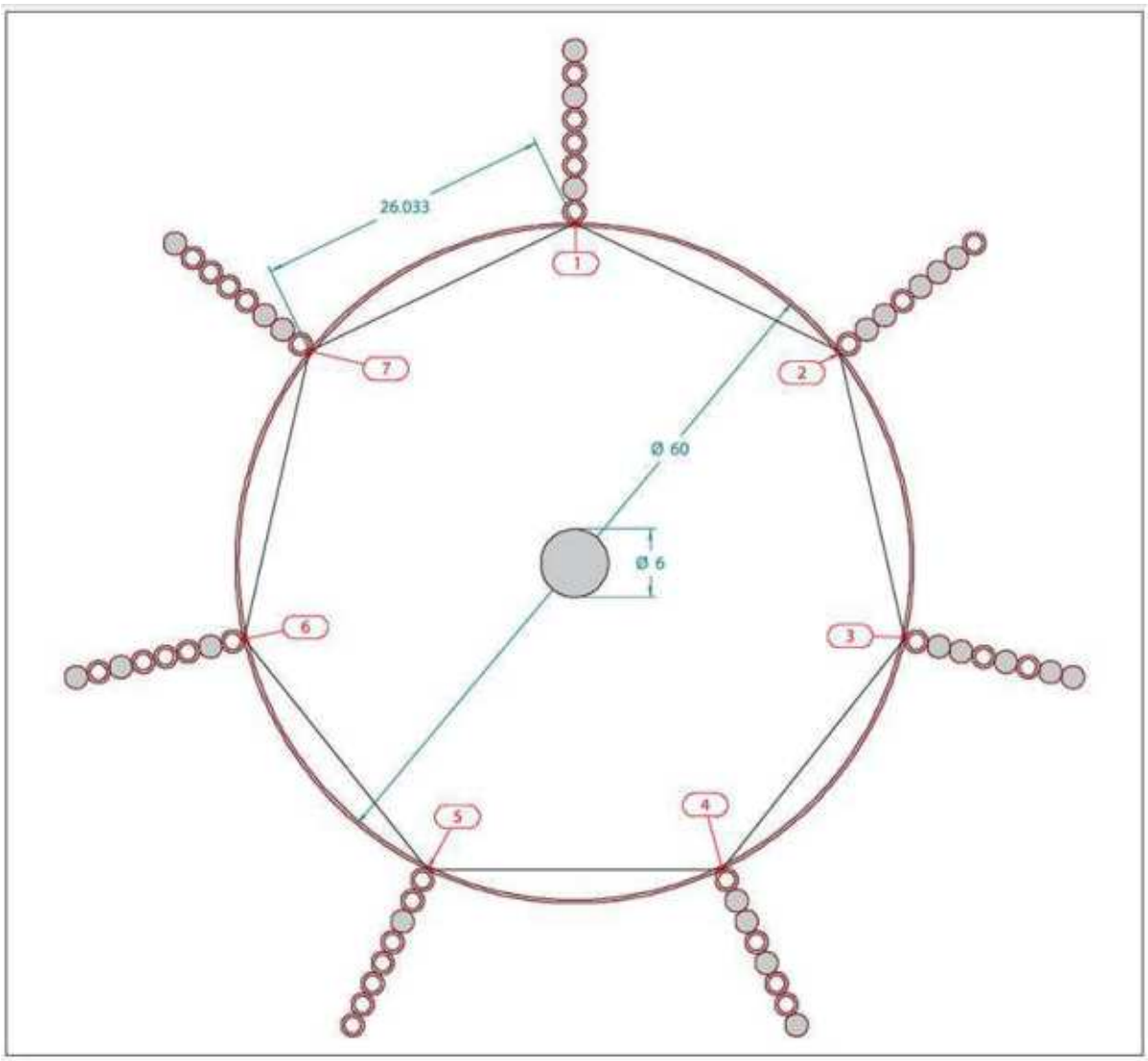
– 01100001 = a

After several draft drawings based on this hypothesis, I began tracing the initial figure on which the final design would grow and

consolidate. The idea was based on a circumference with a diameter of **60 metres**, divided into 7 parts, the vertices of the inscribed regular heptagon that, after calculations, had to be **26 metres** apart. A line of eight perfectly aligned circlets would radiate from each vertex. To encode whether a specific circlet should represent a 0 or a 1, I chose this criterion:

– 0 = circlet that has only the edge and an inner part that is **not flattened**;

– 1 = circlet with a **completely flattened internal part.**



First part of execution. The grey areas generally represent the regions that would be flattened in the field. A line of eight perfectly aligned small circles radiates outward from each vertex and each line contains a sequence of 8 bits based on ASCII code. Decoding these 7 sequences yields the string "Enki Ea". Illustration by Francesco Grassi.

A second step would require the creation of seven petals that protruded from the main circle. Four people working simultaneously would be needed to trace the outlines of the petals that would be used to place an ***edge trimmed with lace***, constituted by many small circles in progression. Two circlemakers, respectively in position on vertices 3 and 7, would be needed to act as centres for the other two, who would start from the edge of the main circumference and maintain a radius of **45.9 metres**, tracing the two arcs that converge on the tip of the petal. To provide the edge constituted by small circles in progression I invented the use of metal hoops covered with white plastic, made with commercially available plumbing materials.

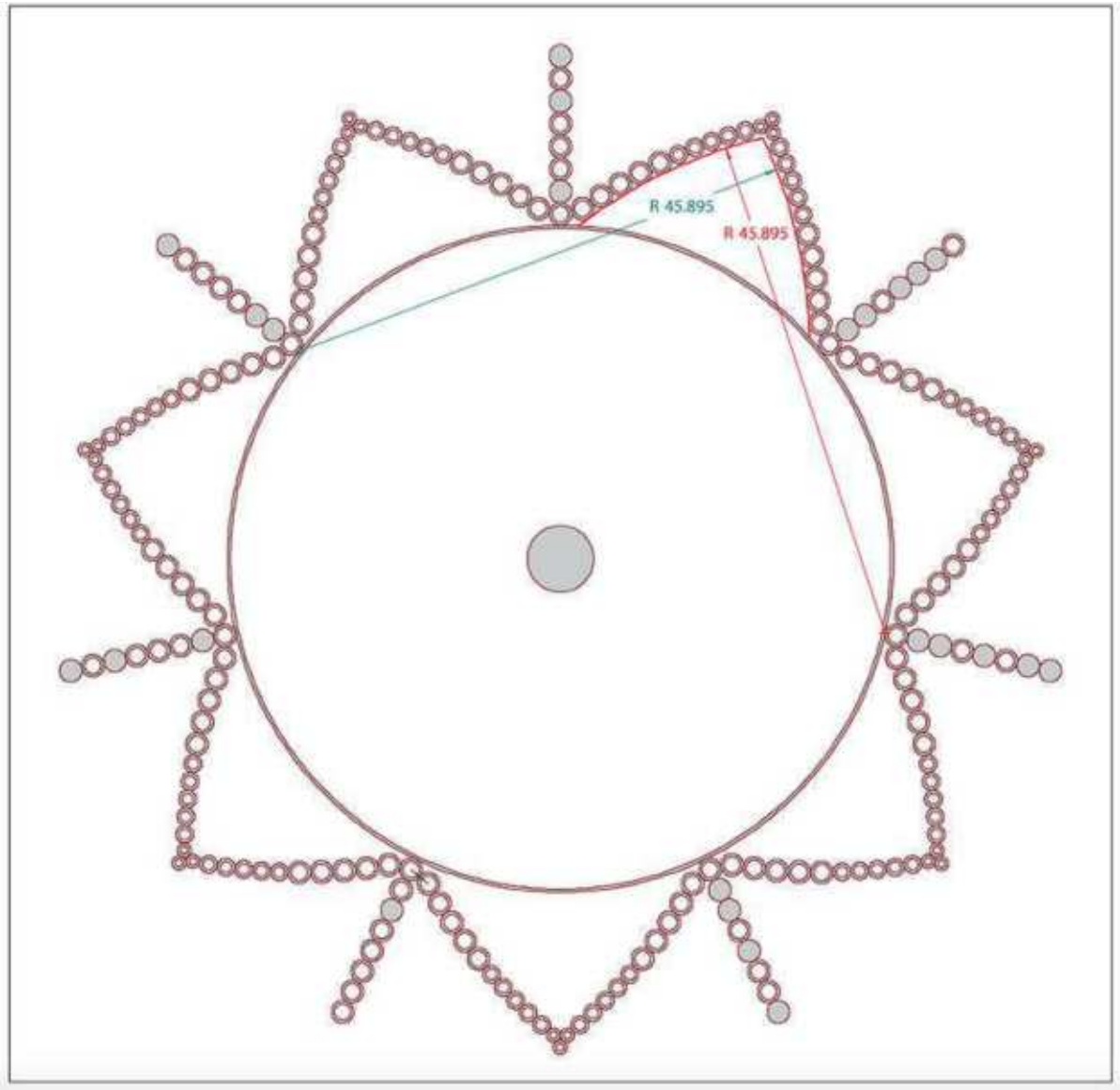
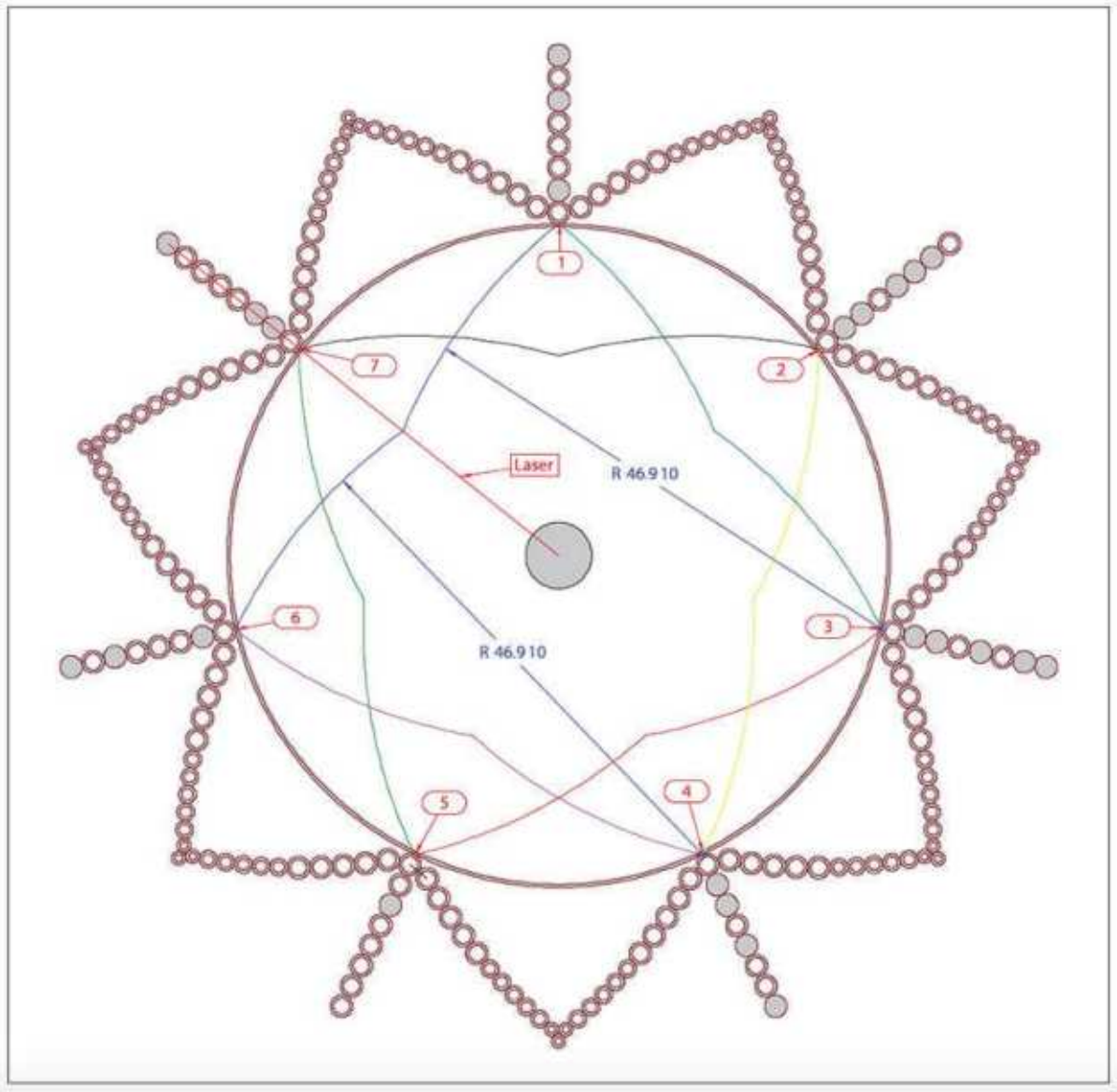


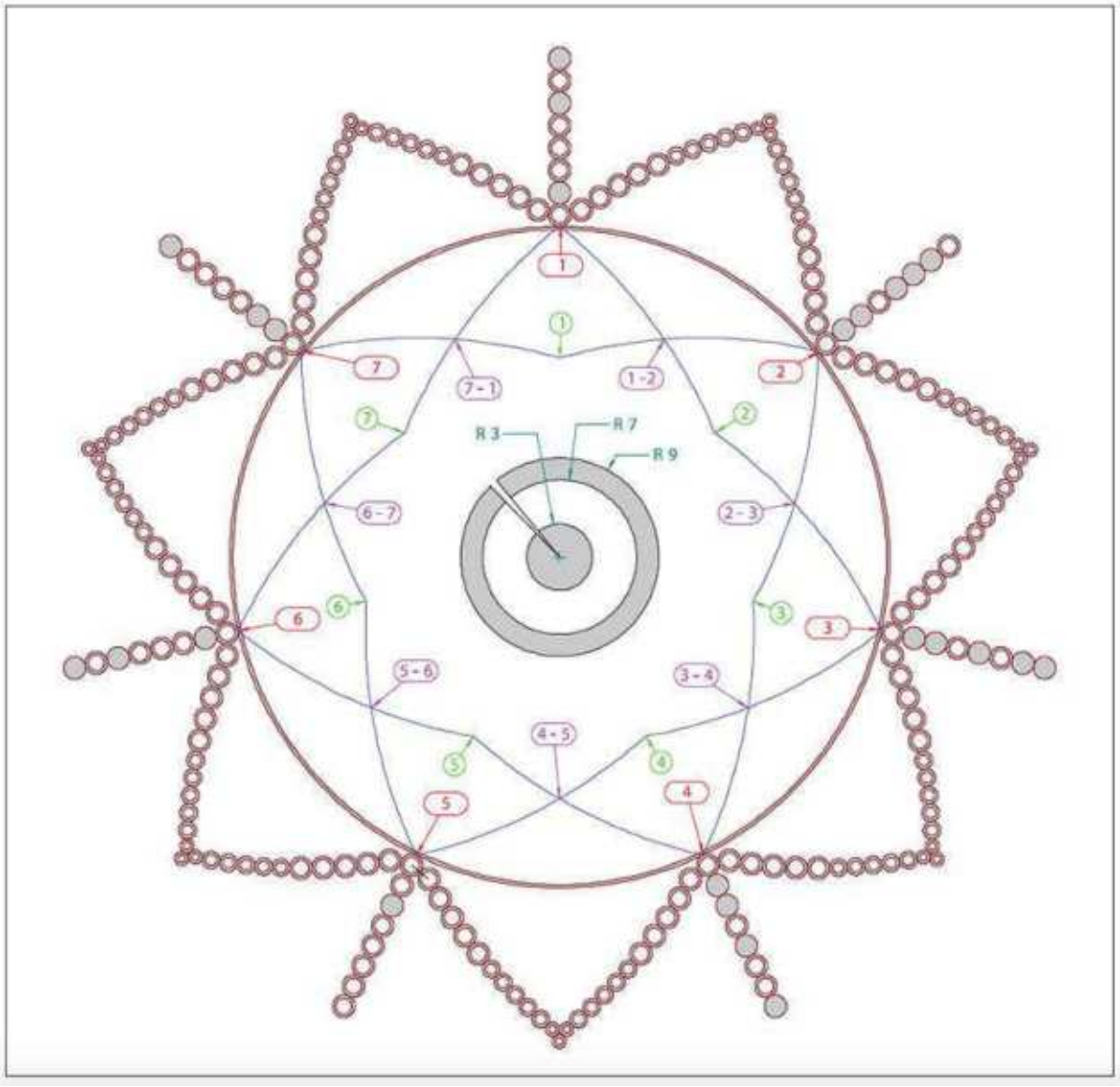
Illustration of the complete execution of the laced edge of all seven petals planned for the second phase. Illustration by Francesco Grassi.

The same method of using four circlemakers working simultaneously (two acting as centres and two tracing the arcs) would be crucial in dividing the area of the circle into various sectors.



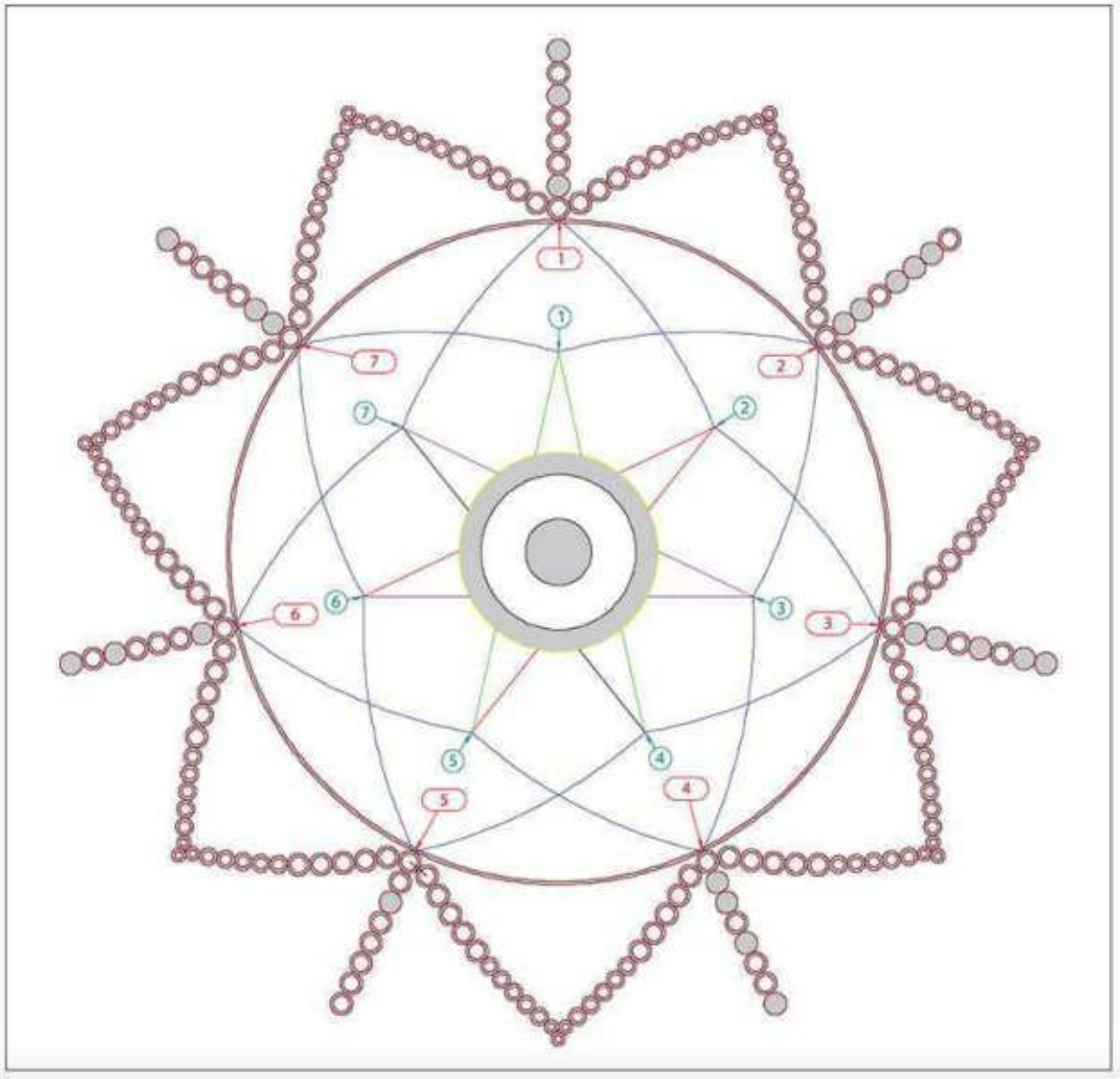
Third phase: the tips of the two pencils *(vertices 1 and 6) are at a distance of* ***46.91 metres*** *from their respective centres (vertices 3 and 4). By proceeding* ***simultaneously*** *towards the interior of the main circle the two* pencils *meet halfway (blue arcs). Repeating the process with the appropriate displacements produces the desired partition of the circular area. The illustration also shows the technique of using a laser beam to create the line of eight circlets perfectly aligned along an imaginary radius that exits from the vertex of the octagon. Illustration by Francesco Grassi.*

A further step would entail creating two circumferences with a radius of 7 metres and 9 metres respectively, concentric to the central one.



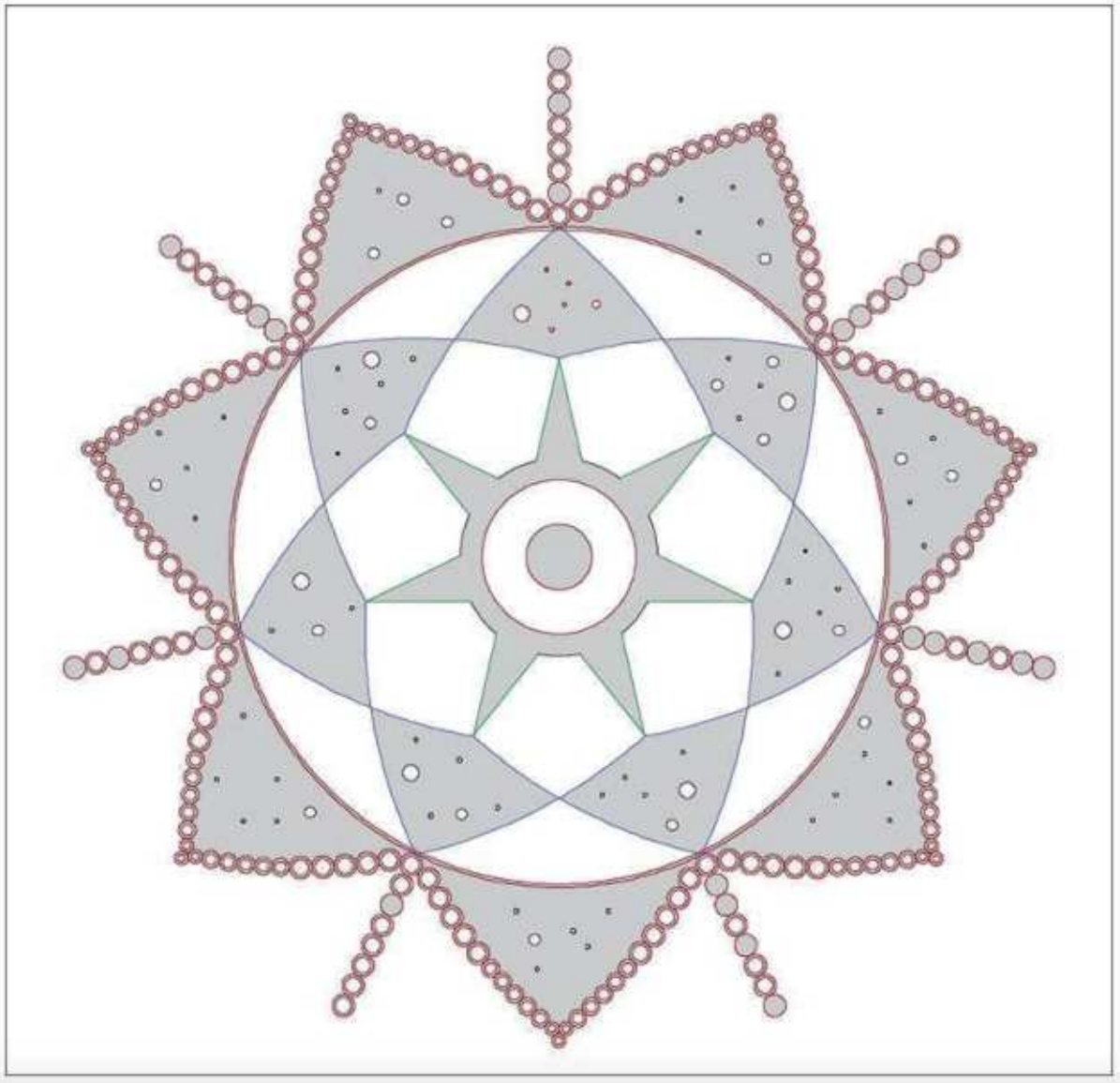
At the centre, the two circumferences (with a radius of 7 metres and 9 metres) that delimit an annular region that is 2 metres wide can be seen. Illustration by Francesco Grassi.

By then using the method for tracing horizontal lines, it is easy to figure out how the team would have to work in order to create the central 7-point star.



By using appropriately the points identified earlier it is possible to create the central 7-point star by tracing rectilinear segments. Illustration by Francesco Grassi.

The final step would then flatten the central star, all seven external petals and the arrowhead sectors comprised between the points of the star and the vertices of the heptagon.



The formation in its final aspect as planned. The small white circles inside the petals and the “arrowhead” sectors are tufts of plants that would be left upright in a random number and position. Illustration by Francesco Grassi.

A few decorative elements were planned in the petals and in the arrowhead sectors. The idea I wanted to embody was to leave circular tufts upright in a **random** number and position, so that they could be a stimulus to observers. Therefore there was no specific message in the upright tufts, as there was instead in the case of the

Enki Ea text, but only the intention to create an absolutely random stimulus. How would the believer community react to this?

The entire formation would be comprised within a square with 100-metre sides.

From theory to practice

It was necessary to find a field of suitable size, preferably in a region that had a special link to crop circle history in Italy. It is commonly assumed that active circlemaker groups began forming in Italy around 2003, when the first Italian formations of some significance were documented.

Among all the Italian areas affected by the phenomenon, the most prolific and characteristic one lies southeast of Turin, where the village of **Poirino** is the epicentre of the formations that have appeared in the Piedmont region.

Thanks to local contacts, with difficulty we were able to locate a field in the vicinity of Poirino that could be used for the purpose. In order to conduct the experiment as closely as possible to the real conditions of normal creations of English circlemakers, we intentionally kept the owner of the field in the dark, intending to repay him, at a later time, after the final consolidation of the reactions of the community, the cost of the wheat related to the area that would actually be flattened.

Ultimately, the field turned out to be not in the municipality of Poirino but in the municipality of another village, **Riva presso Chieri**. The field belonged to the *Cascina Tetti Bai* farm, owned by Mr Giovanni Audritto, and was rather unusual because it was very close to the A21 motorway that connects Turin to Piacenza.

To creates the formation we required at least four circlemakers, since in some situations a smaller number of people would have made it impossible to work. I decided that the total number of circlemakers to be involved had to be six or seven, considering the possibility to perform multiple activities in parallel without having an excessive number of people in the field. In the end we settled on a total of seven circlemakers, symbolically the number of the main Anunnaki.

I was thus able to recruit in the team six more people for this endeavour. I will list some of them by giving their real names; two have requested to remain anonymous. These are the seven circlemakers that created the formation in the night between **18 and 19 June 2011**:

– Francesco Grassi

– Simone Angioni (chemist, University of Pavia. See *simoneangioni.blogspot.it*)

– Nicolas D'Amore (a magician from Argentina who has consulted for CICAP for many years))

– Antonio Ghidoni (computer engineer and amateur astronomer)

– Marco Morocutti (electronic project designer and executive member of CICAP; see *www.marcomorocutti.it*)

– *Agent Vortex*

– *Agent BOL*

The series of storms that affected the area in that period caused great uncertainty and we feared that the field might be damaged by disastrous lodging. However, the field was able to survive the adverse weather and that night was chosen indeed because of its less unfavourable weather conditions.

On 18 June, in the afternoon, after loading backpacks and tools into the car, I drove to Riva presso Chieri in order to meet the other circlemakers before beginning work. Everyone was at the restaurant, except for *Agent BOL*, who would meet us directly at the field. After eating, we stopped to review the key phases of the execution in the car park where we had left our cars; when it began to get dark we went toward the field, where we arrived around 9:30 PM, when darkness was inexorably taking the place of daylight. Full moon had been a few days earlier and indeed the moon was beginning to shine in the sky, where it would reach almost its maximum brightness. Up to that moment, there had been no particular glitches, the night was still long and there was much to do.

After identifying the tramline from which we would enter the field, I therefore traced the first small circumference with a radius of 3 metres and then I began to trace the large circumference, with a radius of 30 metres, that would constitute the framework of the entire formation, while the rest of the team carried rucksacks, bags, boards and various material inside the small central circle. Everyone was there except *Agent BOL*, who had not yet arrived.

Work continued according to the agreed steps; the cars on the Turin-Piacenza motorway rushed by unaware of what was happening in the nearby field, until *Agent BOL* telephoned around midnight saying that he had arrived in the vicinity of the field and that he needed one of us to go to the main road to show him how to enter the narrow lane that ran next to the field, in order to reach the parking area and then start working; *Agent Vortex* volunteered. The other five circlemakers therefore remained in the field.

The choice of the initial centre turned out to be a minor mistake: we should have moved at least 20 metres further up to prevent one of the *spokes* (the lines of eight circlets), the one directly pointed toward the motorway, from ending in a **natural lodging** of the field. Unfortunately, as you can easily imagine, once work has started there’s no going back. When the circlemakers that were tracing that

spoke told me that some circlets would end in the lodging, I simply hoped that the final decoding would not be compromised excessively.

In the meantime, *Agent Vortex* and *Agent BOL* had not returned to the field to work and I had asked two circlemakers to begin flattening the external petals while the other two created the lace-like edges, which was a very hard task. Of course I had advised them to leave circular tufts randomly upright during flattening, choosing the quantity and size on the basis of the area actually available.

Being concerned for the late return of *Agent Vortex* and *Agent BOL,* and since I was not fully aware of how much time had passed but I had the feeling that it was too much, I called *Agent Vortex* on the telephone, assuming that something serious had happened. Fortunately *Agent Vortex* replied that they had just left the car, were at the edge of the field, and were about to walk into it via the tramline. *Agent Vortex* didn't explain exactly the reason for the long delay; I found out only when we went to pick up our cars at dawn. Besides, at that moment I wasn't very interested in knowing the reasons for the delay since there was still much to do and work seemed to be going slowly.

We resumed work and at a certain point, while I was close to *Agent Vortex*, I received some bad news. I was told on the walkie-talkie that one of the circlets of the lace-like edge to the right of the spoke with the letter E of *Ea* was a mess. *Agent Vortex*, who was next to me and had heard the report, realized immediately that he was the one who had made the mistake and let loose a salvo of curses. I, too, at that time felt the need to vent my disappointment: the precious *lace-like edge* had been *spoiled*, but since *Agent Vortex* was next to me I consoled him and I consoled myself by ordering to create, at this point, a sharp and clear edge around that circlet.

I thought that the glaring error would quite probably be interpreted by believers as an additional sign to be decoded. I was not entirely

wrong and, as we will see, we were rewarded.

Time went by and indeed things progressed more slowly than expected. The first rays of sunlight began to shine, telling us that it was time to end our work in a *finished* manner, although it was incomplete. We decided not to flatten the arrowhead sectors, gathered all our material, taking care not to leave anything in the field, and returned to our cars as the light of dawn allowed us to see almost normally.

At the parking spot we found all the cars accept for *Agent BOL*'s; that's when we realised the reason for the delay of *Agent Vortex* and *Agent BOL*. They explained that *Agent Vortex* had gone to pick up *Agent BOL* with his car and together they had decided to leave *Agent BOL*'s car and to return to the field with *Agent Vortex*'s car. But in parking the car, following the indications of *Agent Vortex*, *Agent BOL* had got one wheel stuck in a muddy hollow of the ground. The two had tried unsuccessfully to get the car out and after some time they decided to stop trying in order to join us in the field.

After the night's hard work, as the morning light lit the scene completely, the seven circlemakers/Anunnaki rushed to the challenge of releasing the car trapped with one wheel in the mud. It was truly a strenuous task, so much that at a certain point I even thought that we would have to leave the car there, but in the end our efforts were rewarded and we were all able to leave with our own cars and go home. When I got home, I wrote a message to the other six friends: *"I'm in bed and I'm about to switch off my mobile phone; I'll turn it back on when I wake up. Thank you so much everyone; let's keep our fingers crossed. Whatever the outcome, it has been a great night. Thanks again, keep in touch."*

From the *dark side* to the *light side*

The work we had done in darkness now had to be taken toward the *light side* of the phenomenon. In other words, the formation that we had just made had to be disclosed to the public in some way. One of us, after waking up, reported to a local flying club that there was something that might be a crop circle in a field near the *Cascina Tetti Bai* farm, close to the motorway, and was thus able to obtain aerial photographs of the formation.

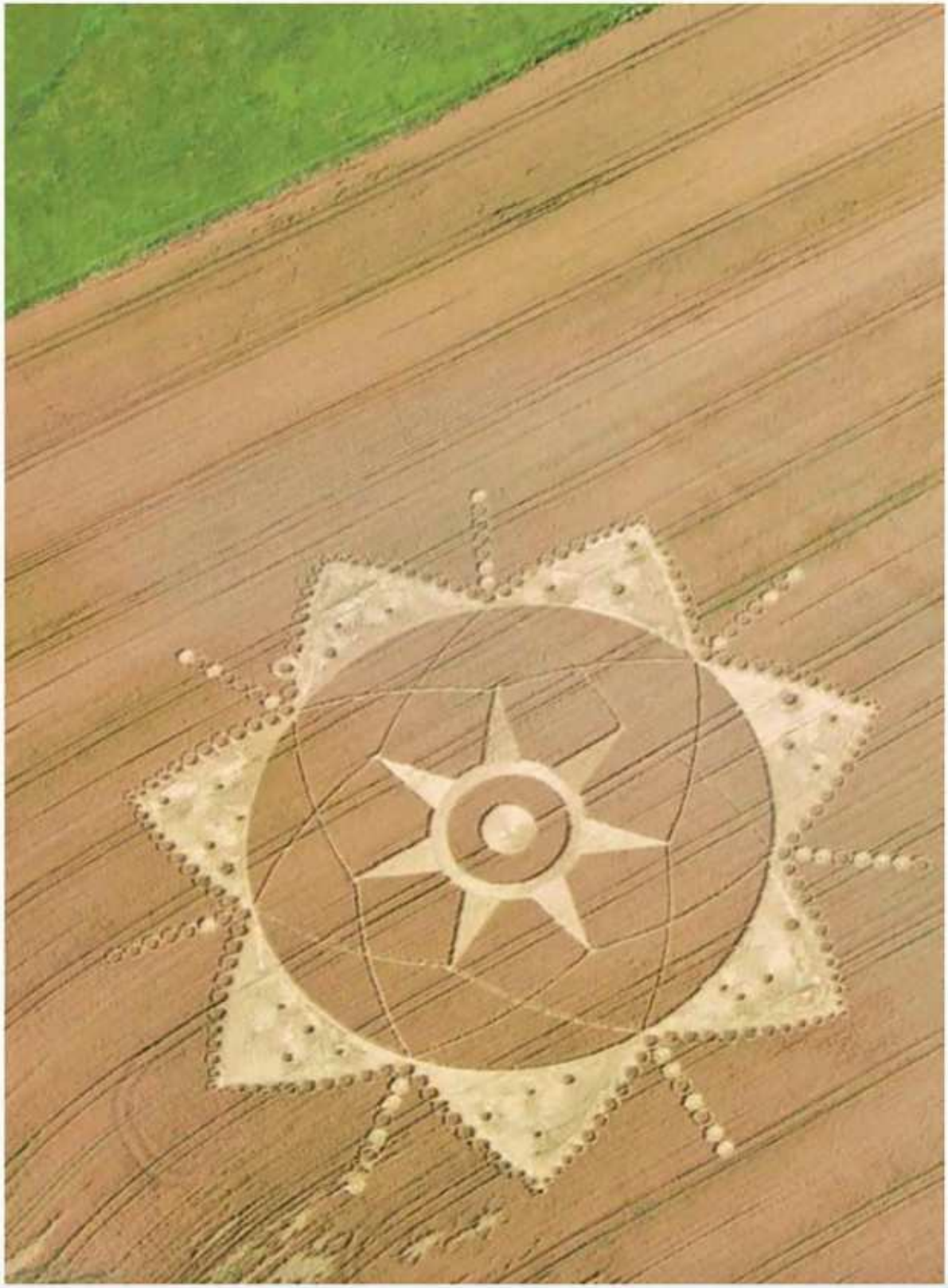
When you look at your work from above, you're always amazed at how it is possible to create such large formations so precisely by planning things from ground level. We liked the formation very much and we began to congratulate ourselves, although we regretted the **glaring error** of the circlet on the lace-like edge and the fact that the formation was **incomplete**. But what was done was done and we certainly couldn't go back.

The Enki Ea *formation in the field (bottom left) between the* Cascina Tetti Bai *farm and the A21 Turin-Piacenza motorway. Copyright: Francesco Grassi.*

The formation, the farm and the motorway seen from another position. Copyright: Francesco Grassi.

The formation and the motorway. Note the tip of the spoke directed toward the motorway, within a natural lodging. Copyright: Francesco Grassi.

Aerial view. Conspicuous natural lodgings are present in the field to the left of the farm. Copyright: Francesco Grassi.



Detail of the formation, which allows to decode the message written in the spokes. The spoke in the lodging directed toward the motorway (at the bottom in the photograph) and the wrong circlet of the lace-like edge (upper left petal) are clearly visible. Copyright: Francesco Grassi.

A person who did not belong to the *circle* of seven had been tasked with sending anonymously a report to all the main Italian Internet websites that deal with the crop circle phenomenon. Among these, the first one that showed interest in the report was Margherita Campaniolo's Spacefreedom [15], which published on 20 June the following short article:

> [15] Margherita Campaniolo (www.margheritacampaniolo.it) is an Italian crop circle researcher who has been following the phenomenon passionately and with scientific rigour for several years. She has written a book, *Cum grano salis: viaggio nel mondo dei cerchi nel grano* [With a grain of salt: journey in the world of crop circles], published by UPIAR in 2008, which reports her research, converging on the human hypothesis. See www.upiar.com/index.cfm?artID=178. Her article was posted at www.margheritacampaniolo.it/crop_circles_2011/poirino_2011_news.htm.

Late this morning we received an email reporting the probable appearance of a crop circle in the region of Poirino, in the province of Turin, which is now well-known (due to the phenomenon).

Someone who signs himself Max says:

Hi,

This morning I was told that in a field of wheat next to the motorway between Riva presso Chieri and Poirino there might be something unusual.

The field is right next to the motorway on the right, going towards Turin. I went to see the field close to the farm from the bridge in via Tamagnone and looking downward I could see that in the field there was something that might be a crop circle.

I obtained the number of a nearby place from which small planes take off and I was able to speak with a person who flies and could go in the afternoon to take some photos; I am waiting to see them but they haven't arrived yet.

I think this report might be useful to you and if you, too, like the others that I notified, are interested in some photographs I can send them to you.

I hope that the photos will allow to see that it is indeed a crop circle, since we are very close to Poirino.

We started work immediately, locally as well, and we will let you know soon as possible what this actually is.

In a rather quiet season of Italian crop circles, news from Poirino is certainly promising.

Date: 20 June 2011

Author: Margherita Campaniolo

Source: Space Freedom

The next day, Margherita Campaniolo published [16] the first pictures of the formation, which began to circulate and were picked up by various Italian websites, reaching the most famous British portal dedicated to crop circles: Crop Circle Connector [17].

[16] *www.margheritacampaniolo.it/crop_circles_2011/poirino2011.htm*.

[17] *www.cropcircleconnector.com*.

In just a few days, our formation had become known worldwide. All the enthusiasts were talking about it in Italian and non-Italian forums as well as on Facebook and in general everywhere on the Internet. The first videos started to appear on YouTube [18]. No one doubted our circle, everyone was enthusiastic about it all over the world. Exactly as had happened to Doug and Dave. Our formation was now standing on its own feet and the experiment had officially begun.

[18] *www.youtube.com/results?search_query=poirino+crop+circle+2011*.

Reactions from believers

It is impossible to list all the reactions elicited by our crop circle, and it is likely that in the future our formation will generate additional hypotheses, connections and conjectures by believers despite the fact that its real origin has been disclosed in this book. Perhaps it is

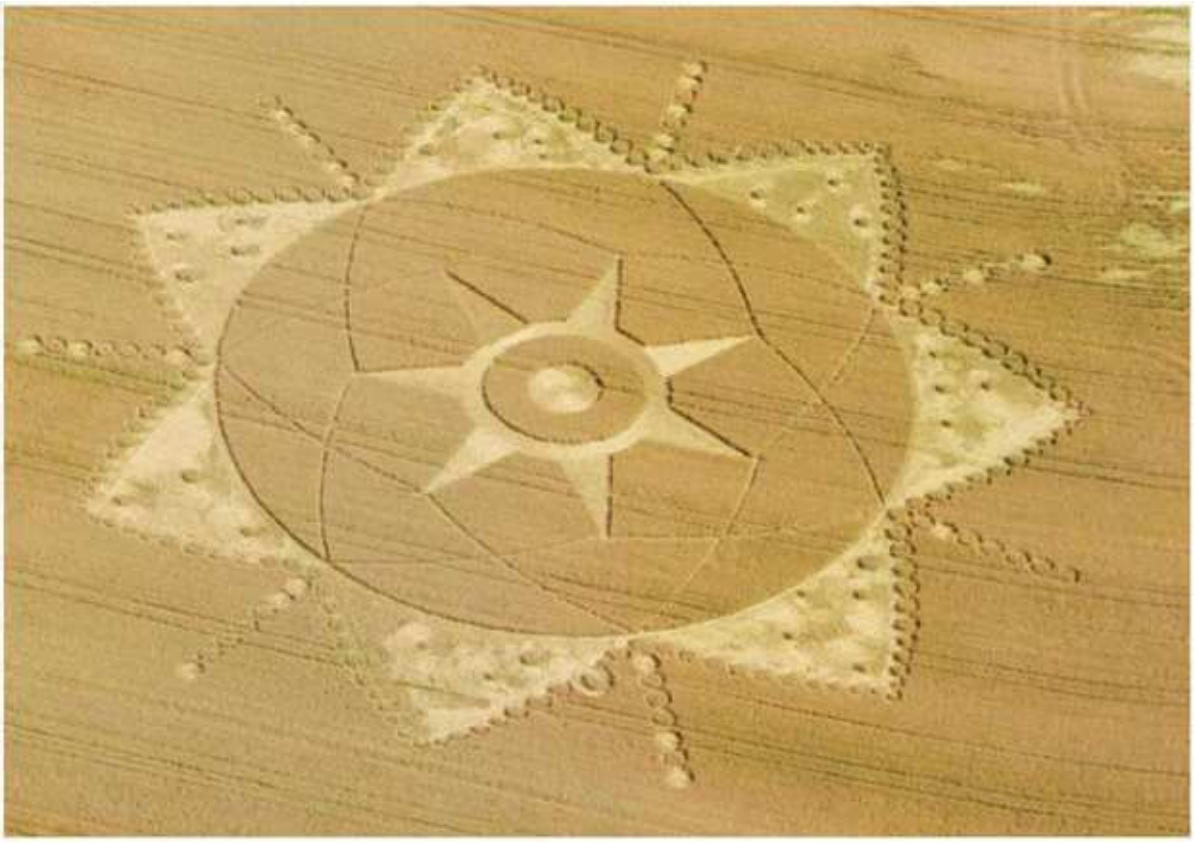
best to quote the CropCircleConnector website [19], which usefully collected all the most significant comments as they gradually appeared.

> [19] *www.francescograssi.com/ebook/ccsoi/v01/c04/019/*.

Among that website's many comments I'll focus in particular on those of two researchers which, for the sake of convenience, I will identify as *John* and *Phil*. For our analysis, we are interested in the reactions, not their true authors. For the other contributions, some of which are truly remarkable, please refer to the previously mentioned page.

Within a couple of days, the decoding of the seven spokes began to circulate. Here's what John wrote:

> The Poirino 2011 contains some coded information. Among other things, the outer rim contains the names "Enki Ea", coded in ASCII. These are names of a Sumerian god: Lord of the earth, god of water, creator of mankind, etc. See: http://en.wikipedia.org/wiki/Enki
>
> John



Another close-up. The incorrect circlet is at the bottom. Copyright: Francesco Grassi.

Phil not only decoded the message in the spokes; he assumed that it had been *Enki Ea* himself who had created the crop circle and had signed it:

> A new ASCII code was drawn in crops at Poirino, Italy on June 20, 2011, and seems to identify the crop artist as “Ea” or “Enki” who was a tall, blond, extra-terrestrial god in ancient Sumeria.
>
> A new crop picture which appeared near Poirino, Italy on June 20, 2011 shows at its centre a large seven-pointed star, which clearly resembles another star-like crop picture from Lane End Down in southern England during July of 2005. That 2005 crop picture predicted the outburst of Comet 17P Holmes two years later in October of 2007. Could another cometary outburst be imminent?
>
> Even more interestingly, a series of seven rays along the outside of that new crop picture at Poirino are written in eight-bit ASCII code, and seem to identify the crop artist as “Ea” or “Enki”, who was a tall blond extra-terrestrial god in

ancient Sumeria. According to ancient legends, he and Innanna [sic] created modern humans by hybridizing sperm from the male gods with eggs taken from local aboriginals, already living on Earth tens of thousands of years ago.

The precise ASCII code which was drawn at Poirino goes as follows, reading clockwise around its large seven-pointed star:

01000101 E

01100001 a

01000101 E

01101110 n

01101011 k

01101001 i

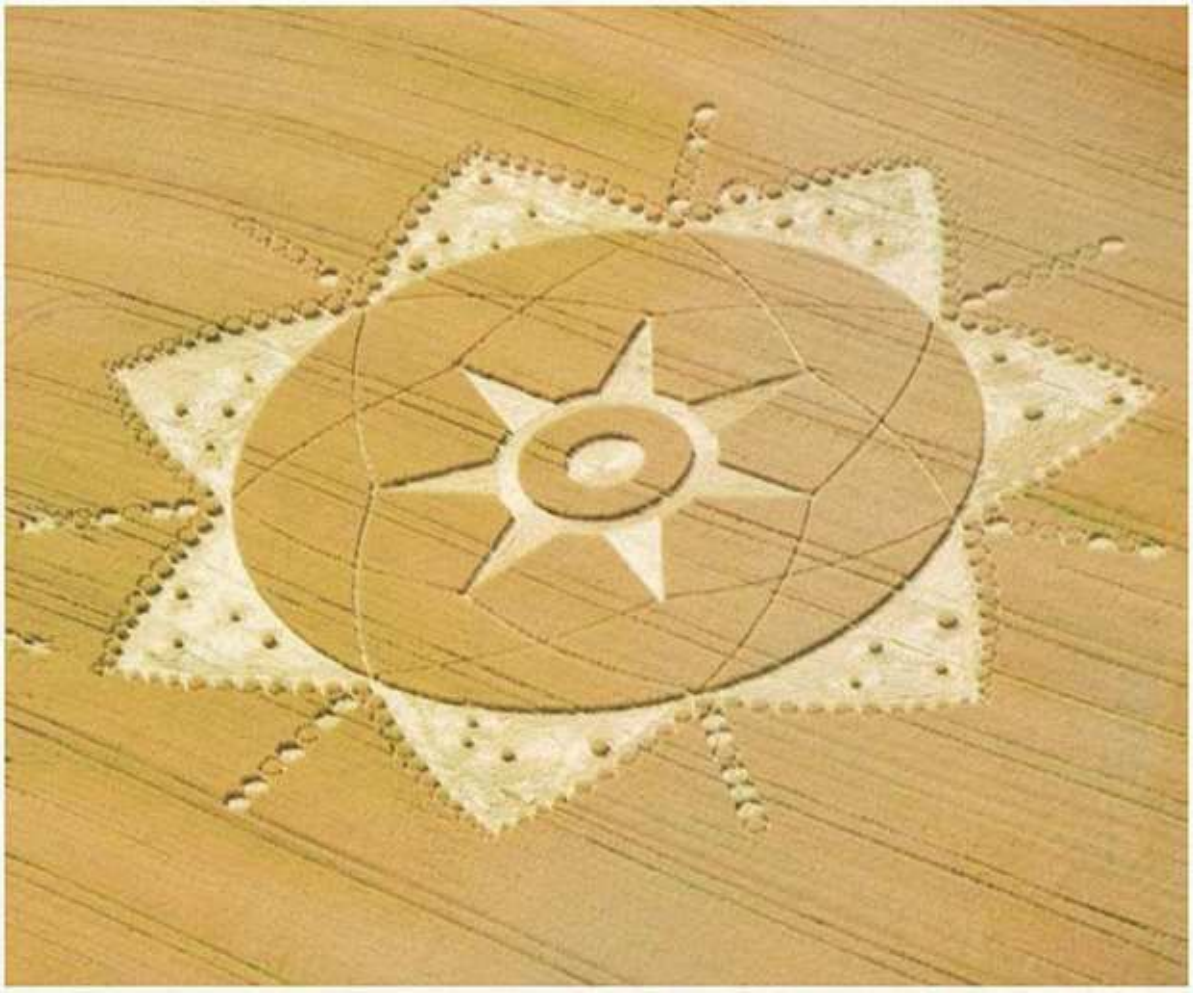
00100000 space

That amazing crop picture also shows a series of “stars” around its seven edges, but it is not clear whether those symbols represent astronomical images around an exploding comet (as for Lane End Down 2005), or rather some clever mathematical code? Counting each set of “stars” individually, we seem to see “5.334444”.

Last summer in 2010 at Poirino, the precise number of “stars‹ in a similar crop picture specified the famous equation equal E = mc2 in decimal ASCII code. No such obvious explanation seems clear yet for “stars” in this new 2011 crop picture, but helpful suggestions from the public would be welcome!

Phil (in London, headed for Wiltshire)

Phil also counted the tufts left standing inside the sectors (we hadn’t; as mentioned earlier, they had been made randomly both in terms of number and in terms of position) and by identifying the mistake in the lace-like edge as a decimal point within a number he had reconstructed the decimal number **5.334444**. The numeral 5 was obtained by counting the **five tufts** in the sector to the left of the mistake in the lace-like edge; the ***point*** that marked the beginning of the decimal part coincided with the **incorrect circlet** of the lace-like edge and the other digits likewise were the number of tufts present sequentially in each of the other sectors.



*Counting the tufts in the various petals and assuming that the incorrect circlet is the decimal point of a number with decimals, one can reconstruct the numeral **5.334444**. Copyright: Francesco Grassi.*

An interesting passage of Phil's analysis is his reference to a formation that appeared the previous year in a field in the municipality of Poirino. In that formation, the circlemakers had encoded the famous Einstein equation again by using ASCII code.

At this point John intervened again and stressed this idea and added other information to Phil's contribution:

> The dots mark and separate the words. The sets of 3 points correspond to the name "Ea", the 4 points to "Enki" and the 5 point set corresponds to "SPACE".

> This gives us an order of the words:
>
> 3 – “Ea”
>
> 4 – “Enki”
>
> 5 – “Space”
>
> So it really seems to me that the “Space” is not that separate between “Ea” and “Enki”, but it’s actually a word that comes after them, maybe really to mean that Enki is from (outer)space. I also wonder where words 1 and 2 might be? An older CC perhaps?
>
> John

As it progressed from one analogy to the next, this utterly wrong interpretation became gradually more consistent and self-reinforcing. The *trivial* **spacing** character that had been used to separate the word *Enki* from the word *Ea* had actually become the representation of **space** from which the extraterrestrial *Enki* came. All this was simply sublime.

Based on this new intuition, Phil therefore finalised the analysis by discussing it on Facebook with John in the *“Circle Chasers”* group of crop circle enthusiasts:

> A message of five words in total from the mysterious crop artist, who finally seems to reveal himself after twenty years as Ea-Enki of the Annunaki *[sic]*, “father of mankind”
>
> For twenty years 1990 to 2011, a wide variety of crop pictures have been appearing in England or across the world, without any definite indication as to their origin. Now at Poirino in Italy during June of 2010 then again during June of 2011, they have given as a message of five words 1-2-3-4-5 in eight-bit ASCII code, which stays in total “E = mc2 Ea Enki space”. Two words 1-2 were given in 2010, and another three words 3-4-5 in 2011.
>
> “Ea” Or “Enki” was a famous god among the Annunaki *[sic]* in Sumeria 5000 years ago. He reportedly created humans on Earth by genetic engineering, and also warned Noah (Utnapishim) before the Flood. "Space" is definitely listed as a fifth word, meaning that he is now “in space”. Are the Annunaki *[sic]* about to return, or is there going to be another “Flood”? This new crop message is very important (if true), and its two-year delivery rules out any possibility of local human construction.
>
> Phil with help from John on “Circle Chasers” Facebook

Four tufts photographed from the ground. Copyright: Francesco Grassi.

Two tufts in close-up. Copyright: Francesco Grassi.

21 December 2012 is now long gone and therefore Nibiru has not destroyed the Earth and the Anunnaki have not return to our planet, yet as usually occurs when these extraordinary predictions fail, some will always say that there's always time. We'll see. Anyway, we could not honestly have expected anything better from the comments on forums, on Facebook and in videos.

Countless other incredible interpretations appeared in the page on CropCircleConnector that documented the comments regarding our formation, but in any case it is sufficient to go online to any search engine and search for information with the right keywords (*"Poirino crop circle 2011"*, *"Riva crop circle 2011"* or the like) to find countless references to articles and videos that extol the crop circle at Riva presso Chieri of 2011.

For example, some people decoded those random dots as constellations and others even deduced from the decimal number **5.334444** the coordinates of a location in Somalia, deducing that *"So the Extraterrestrial people in their formation are saying that the people in this region are in need of water and help from the international community is required for the local population due to the war [20]."*

[20] www.francescograssi.com/ebook/ccsoi/v01/c04/020/.

Four tufts in the lower part of the picture. The seven-point star is clearly recognisable. The farm is in the background. Copyright: Francesco Grassi.

Everything that had happened was absolutely unthinkable; we never could have imagined such an incredible media reaction and such an enormous quantity and variety of interpretations to the stimuli that we had inserted in the formation. The experiment had been certainly successful; we had been able to demonstrate that **the aliens are us**.

A *ghost* in the field

Perhaps *Enki Ea* never came and will never return to Earth, but in the meantime his *ghost* has already appeared. A new formation that duplicated exactly the initial one materialised in March 2012, exactly at the location of our formation of Riva presso Chieri of 2011. It was

constituted by short green plants that had grown at the flattened regions. Even the circular areas of the tufts that were upright were visible within the green areas. The ***ghost* of Enki Ea** had returned; these formations that appear approximately one year later are in fact known as *ghosts*.

This is a rather frequent phenomenon, which believers interpret mysteriously, ascribing everything to hypothetical *energies*, always mentioning it as a demonstration of the *genuineness* of the formation of the previous year. How could mere humans create a crop circle that was then able to *re-materialise* in the field as a *ghost* the following year?

The ghost *of the formation between the* Cascina Tetti Bai *farm on the left and the motorway on the right. Copyright: Francesco Grassi.*

The ghost *of the formation and the motorway. Copyright: Francesco Grassi.*

A closer view. Copyright: Francesco Grassi.

A detail view of the ghost. Copyright: Francesco Grassi.

In this case and in similar cases, the phenomenon is due to the shredding of the plants flattened to the ground due to the treading of thousands of feet. All this ends up creating a situation that is more favourable for the growth of low plants (clearly visible in photographic documentation), which instead has a harder time growing in regions that have not been trampled and are therefore less fertile. The appearance of the ghost was another reward that the formation of the experiment at Riva presso Chieri of 2011 gave us, because it created another sequel in Internet discussions several months after its first appearance.

The time has now come to end our circular journey.

Conclusions

I am often accused of being narrow-minded, of not wanting to understand and not seeing the forest for the trees. This may be true; I certainly have my limitations, but I wonder how many people can say that they have explored this marvellous phenomenon as thoroughly as of as I have tried to do. Perhaps something will happen in the future; perhaps someone will demonstrate that the fully consistent view of the phenomenon that I have described in this book requires revision, but I have no problem with that. The scientific method requires the maturity to change position if proper evidence and demonstrations emerge. We'll see. For the time being, however, as in any analysis of substantial extent, the author has to draw his conclusions while being honest enough to admit that they may be temporary. The time has come to do this and that is what I am about to do.

“I sentence you to be exposed before your peers...”. Illustration by Paolo Vallerga.

Although it is impossible to demonstrate that all crop circles are man-made, it is also true that all the clues converge toward this single only solution beyond any reasonable doubt. The very few sources that state this truth are a drop in the boundless ocean of publications and material of all kinds that has been produced on the subject through the years. Crop circles are a great social phenomenon, which is now worldwide and is derived from UFO beliefs, feeding on their life blood, and this contributes to give them great strength. For

all practical purposes, they are the imperious branch of the ufology tree, which grew starting from close encounters of the second type and in which however, since there was no concurrent UFO sighting, there is only the trace on the ground; or in which, paradoxically, as reported by some witnesses, the sighting occurs days *after* the appearance of the formation.

Those who visit crop circles find themselves walking within a **genuine mystery,** and this is an indescribable sensation that has to be experienced. A thousand words are worthless. Someone who enters a formation with the pure-hearted soul of one whose does not know its origin and imagines that it might have been created by an intelligence not of this Earth will have an incredible experience and feeling. To be inside a mysterious and magical work of art and to be an integral part of it is a unique and unrepeatable moment. In my opinion there is no other art form that can deliver this emotion.

One particular aspect that I like to point out in the crop circle phenomenon is the **circular relationship** that is established among the parties involved: believers and circlemakers. Circlemakers create circles and believers begin to visit them and publicise them. The more they are talked about, the more circlemakers are prompted to continue their work. In continuing their work, circlemakers tend to create increasingly large and complex formations in order to maintain interest and attract other people in this virtual vortex that continues to feed the phenomenon. Therefore, believers and circlemakers live in a symbiotic relationship [21] so that the more the believers feed the circlemakers, by believing that crop circles are unknown in origin, and the more the circlemakers continue to create new circles. In engineering, and specifically in systems theory, this circular relationship is known as ***positive feedback***.

> [21] francescograssi.blogspot.it/2009/10/cerchi-nel-grano-geni-memi-ufo-e-cerchi.html.

Crop circles are in practice a large belief system. When you investigate reports in depth, in some cases you find that things are

not exactly as they have been described; in others it turns out that things are absolutely different, and in others they are not only different but often are entirely made up. The phenomenon is a large, self-supporting belief system that feeds on itself with the complicity of the media, which instead of disseminating verified information produce articles and reports with the goal of attracting readers and viewers and creating scandal.

Ultimately, crop circles are a field of study for **sociologists** and **anthropologists** who study human beings, rather than a subject for scientists such as physicists or chemists, who instead study the properties and structure of matter. At the centre of this enormous circle there is essentially only the human being, with his countless contradictions, his ambitions, his preconceptions and his wish to seek signs from the sky in the *temporary temples* created by flattening crops by human beings who, with their feet firmly on the ground, began to do this as a prank and very soon lost control of it, becoming somewhat *alien*.

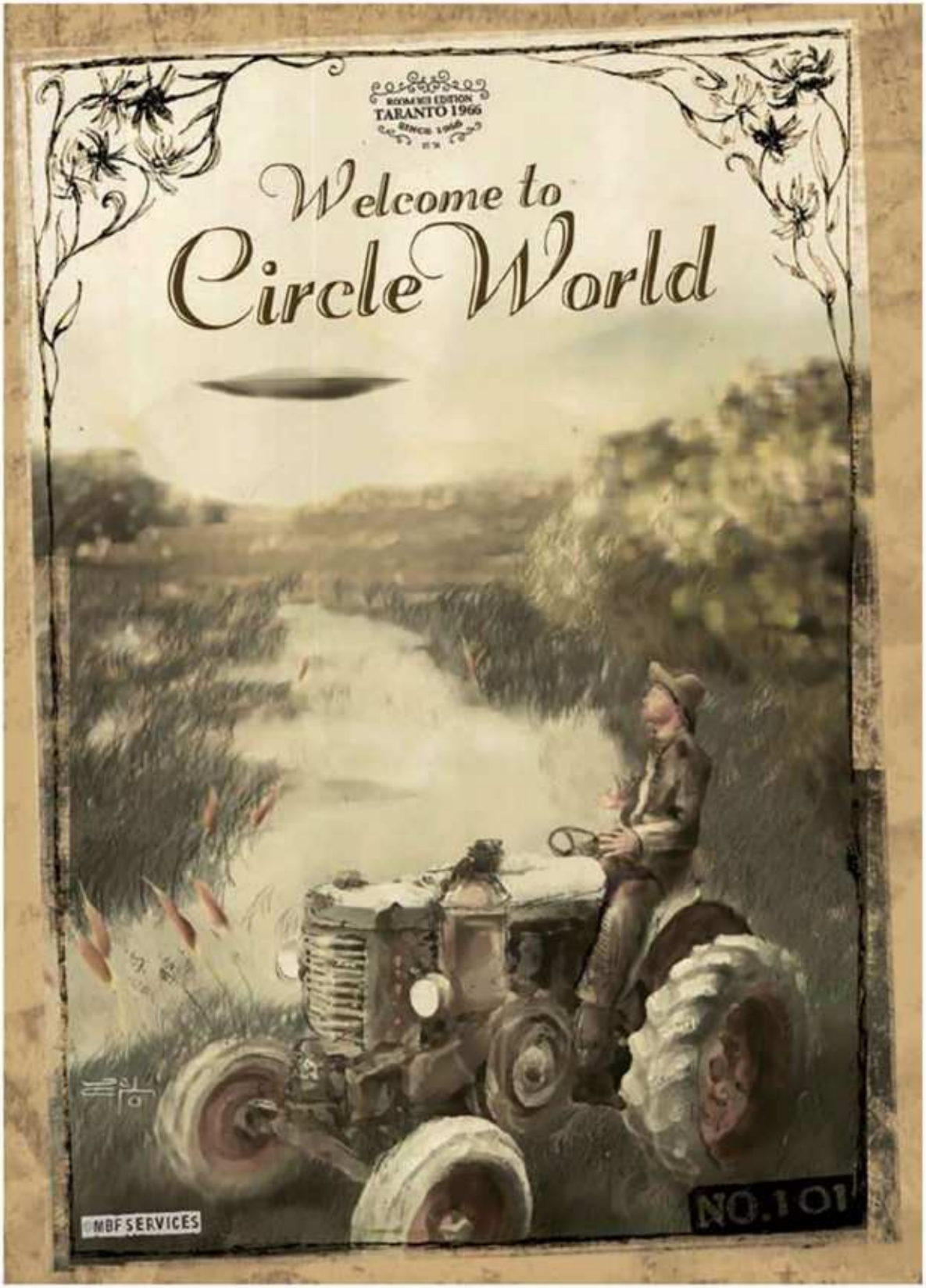
Our journey began with the UFO and the associated trace in the plants of the Tully lagoon of 19 January 1966. This trace was truly particular, a powerful idea, a truly special concept in the mind of the person who decided to replicate the effect it had induced in the population and in the media (Doug Bower). When an idea of this kind begins to spread, then an absolutely uncontrollable *vortex effect* can arise which becomes even more uncontrollable if many minds are involved and, by becoming an integral part of the phenomenon, contribute to increase its size. Initially the process that created the crop circle phenomenon required time, but once it had started it became increasingly fast and unstoppable. As has happened often already, and as will happen again in mankind's history, when a myth is shared by many people at a certain point it becomes *reality*.

Our journey has therefore ended, and the circle that we have traced together is finally closed and complete. If you wish, you are free to

retrace it as many times as you want, going back in full freedom to the introduction to check its details and finishing touches.

It is time to put away tape measures, flags, boards and tools in the rucksacks. I have picked up mine. I'm starting to exit through the tramline that we used to enter and I'm leaving you to pick up the other tools that we disseminated in the sources and in the appendices. It is now dawn and it's time to go; I'll wait for you for a while outside the field. If I don't see you arrive, I will assume that you've decided to go around in circles a little while longer. My fellow travellers. I hope that you, too, will return home sooner or later. Now you know the way. Good luck [22].

[22] Pink Floyd, *The Wall*, *Outside the wall* (Roger Waters): *"All alone, or in twos, The ones who really love you Walk up and down outside the wall [...]. Isn't this where..."*.


TARANTO 1966
Welcome to
Circle World
NO.1 01
MBF SERVICES

Welcome to circle world: www.francescograssi.com/circleworld. 1966: Tilly, Australia. Our circular voyage continues... Authors: Giacomo Rinaldi and Paolo Vallerga.

Painting circles in the corn

The time has come to clarify the meaning of the verses that introduce each of the three parts of this book. These are the lyrics of a song composed, sung and played by Jim Chorley (*jimchorley.com*), an acoustic guitar player from Southampton whose surname should ring a bell. Jim is the son of Dave Chorley, the great Dave who, together with Doug, started the whole story of crop circles.

Jim writes songs inspired by his personal experiences, and the lyrics of *Painting Circles In The Corn* briefly and effectively tell the story of Dave and of his friend Doug. They end with a particularly touching dedication to his father, which I find significant because this book, in a way, is part of the legacy left by Dave.

All in Good Time is the title of the album that contains the song *Painting Circles in the Corn*. By kind permission of Jim Chorley, you can hear the song at this *link*. Here is the full text of its lyrics.

> Three in the morning as England was snoring
>
> There were two men in a field
>
> As the moonlight was shining, they sat there dining
>
> On cheese rolls and cans of beer
>
> There's no better place for an English man
>
> Than his countryside at dawn,
>
> Telling legends and stories
>
> In the land they were born...
>
> And painting circles in the corn

What started as fun, pretty soon had become

Aliens from outer space

But they carried on and the T.V. at One

With big smiles on their face

Plenty were paid, experts were made

Fiction became a fact

Well I guess people they crave,

Answers from space

I can’t argue with that

The time came to come clean and wake from the dream

The papers were informed,

On worldwide T.V. screens and in magazines

They were the men who conned the world

Now old Cheesefoot Head will never forget

What happened in her past,

You know I sat and wept on the day you left

But I know your legacy will last

Thank you Jim, thank you Dave...

Acknowledgments

Giovanni Audritto, owner of the field at Riva presso Chieri, for understanding the importance and seriousness of the experiment that was revealed to him over a year after it was carried out.

b1ackprojects, for the use of his photographs and for the historical and priceless videos on his YouTube channel (*www.youtube.com/user/b1ackprojects*).

Margherita Campaniolo, with my apologies for involving her unwittingly in the experiment of the Riva presso Chieri formation of 2011. Margherita, you will know when you read the book. Thank you.

Alessandra Carrer (graphic designer and collaborator of CICAP, *www.carreraproject.com*), for the graphic design of the cover, and **Cristina Visentin** (photographer and collaborator of CICAP, *www.cristinavisentin.it*), for the photograph on the back cover of the paper edition of this book.

Jim Chorley, for composing, singing and playing the nice acoustic ballad *Painting Circles in the Corn*, dedicated to his father Dave.

Claudio Cocheo and **Paolo Russo**, for believing in all this and for writing with me the scientific article published in the JSE.

Remko Delfgaauw, for the photographs of the Dutch formations.

Andrea Feliziani, for granting permission to use his wonderful photographs, taken from the book *Persi nella memoria*, by Andrea Feliziani and Gabriella Giunta, published by Mondadori Electa, Milan 2006. My heartfelt thanks to you, Andrea.

Paul Fuller, for the consulting work and the study material that he has provided me through the years.

Luigi Garlaschelli (chemist, executive member of CICAP and investigator of mysteries, *www.luigigarlaschelli.it*), for encouraging me through the years to write a book on crop circles.

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Edoardo Russo and all the people of CISU (*Centro Italiano Studi Ufologici*, *www.cisu.org*), for helping me and for providing through the years so much precious UFO- and crop circle-related material.

Paolo Vallerga (graphic designer and boardgame publisher, *www.scribabs.it*) and **Giacomo Rinaldi** (young and promising illustrator who has taken part in many important national drawing contests, *jackrinaldi.wordpress.com*), for the wonderful drawings they created specifically for this book.

Matthew Williams (British circlemaker, *www.youtube.com/user/truthseekers666*), for introducing me to the art of circlemaking and for allowing me to know about the *dark side* of the phenomenon.

Terry Wilson (*oldcropcircles.weebly.com*) for some sources.

Moreover, I wish to thank in particular all the people who, together with me, worked through the years at the titanic endeavour of transcribing, translating and subtitling Matthew Williams' video documentary on circlemakers (and others): **Mariolina Aimone, Stefano Bardelli, Margherita Campaniolo, Marco D'Arienzo, Giorgia Grassi, Marta Grassi, Luca Iacono, Loris Magnani, Maddalena Messa, Ivana Taverni, Mariano Tomatis** (writer, mathematician and magician, *www.marianotomatis.it*).

In this regard, special mention must go to my invaluable friend **Fara Di Maio**, who in addition to handling the translations also coordinated the following group of excellent translators: **Federica Amici, Matilde Anzolin, Ambrogio Cazzaniga, Matteo Ciccone, Elisabetta Deriu, Floriana Giuganino, Hanni Janett, Annalisa Mari, Marco Michelazzi, Luisa Stevano.**

Last but not least, the circlemakers of the formation at Riva Presso Chieri, for *painting in the corn* together with me the *Enki Ea* formation: **Simone Angioni, Nicolas D'Amore, Antonio Ghidoni, Marco Morocutti, Agent Vortex, Agent BOL**.

A special thanks goes to **Agent Vortex** for his invaluable work. Thank you, my dear friend.

I have kept my last word of thanks for **Agent BOL:** he knows why.

APPENDIX A

The Mowing Devil (full text of pamphlet)

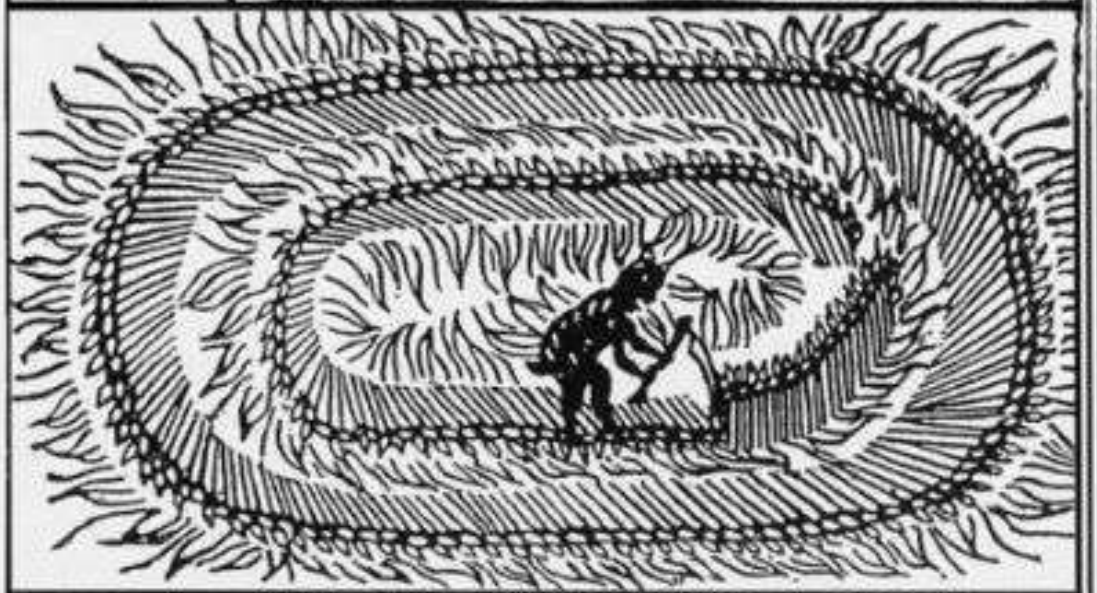
The Mowing-Devil:

Or, Strange *NEWS* out of

Hartford-ſhire.

Being a True Relation of a Farmer, who Bargaining with a Poor *Mower*, about the Cutting down Three Half Acres of *Oats*; upon the *Mower's* asking too much, the *Farmer* wore, *That the Devil ſhould Mow it, rather than He*. And ſo it fell out, that that very Night, the Crop of *Oats* Mow'd as if it had been all of a Flame; but next Morning appear'd ſo neatly Mow'd by the Devil, or ſome Infernal Spirit, that no Mortal Man was able to do the like.

Alſo, How the ſaid *Oats* ly now in the Field, and the Owner has not Power to fetch them away.



Licenſed, *Auguſt* 13th, 1686.

THE MOWING-DEVIL: OR, STRANGE NEWS OUT OF HARTFORD-SHIRE

Being a True Relation of a Farmer, who Bargaining with a Poor Mower, about the Cutting down Three Half Acres of Oats: upon the Mower's asking too much, the Farmer swore That the Devil should Mow it rather than He. And so it fell out, that very Night, the Crop of Oat shew'd as if it had been all of a Flame: but next Morning appear'd so neatly mow'd by the Devil or some Infernal Spirit, that no Mortal Man was able to do the like.

Also, How the said Oats ly now in the Field, and the Owner has not Power to fetch them away.

Licensed, August 22, 1678

Men may dally with Heaven, and criticize on Hell, as Wittily as they please, but that there are really such places, the wise Dispensations of Almighty Providence, does not cease continually to evince. For if by those accumulated circumstances which generally induces us to the belief of any thing beyond our senses, we may reasonably gather that there are certainly such things as DEVILS, we must necessarily conclude that these DEVILS have a HELL: and as there is a HELL, there must be a HEAVEN, and consequently a GOD: and so all the Duties of Christian Religion as indispensable subsequents necessarily follow.

The first of which Propositions, this ensuing Narrative does not a little help to confirm. For no longer ago, than within the compass of the present Month of August, there hapned so unusual an Accident in Hartfordshire as is not only the general Discourse, and admiration of the whole country: but may for its Rarity challenge any other event, which has for these many years been Product in any other County whatsoever. The story thus.

In the said County lives a Rich industrious Farmer, who perceiving a small Crop of his (of about three Half-Acres of Land which he had sowed with Oats) to be Ripe and fit for Gathering, sent to a poor Neighbour whom he knew worked commonly in the Summer-time at Harvest Labour to agree with him about Mowing, or Cutting the said Oats down. The poor man as it behoov'd Him endeavour'd to sell the Sweat of his Brows and Marrow of his Bones at as dear a Rate as reasonably he might, and therefore askt a good round Price for his Labour, which the Farmer taking some exception at, bid him much more under the usual Rate than the poor Man askt for it: So that some sharp Words had past, when the Farmer told him he would Discourse with him no more about it.

Whereupon the honest Mower recollecting with himself, that if he undertook not that little Spot of Work, he might thereby lose much more business which the Farmer had to imploy him in beside, ran after him, and told him, that, rather than displease him, he would do it at what rate in Reason he pleas'd: and as an instance of his willingness to serve him, proposed to him a lower price, than he had Mowed for any time this Year before. The irretated Farmer with a stern look, and hasty gesture, told the poor man, That the Devil himself should Mow his Oats before he should have anything to do with them, and

upon this went his way, and left the sorrowful Yeoman, not a little troubled that he had disoblig'd one in whose Power it lay to do him many kindnesses.

But, however, in the happy series of an interrupted prosperity, we may strut, and plume our selves over the miserable Indigencies of our necessitated Neighbours, yet there is a just God above, who weighs us not by our Bags, nor measures us by our Coffers; but looks upon all men indifferently, as the common sons of Adam: so that he who carefully Officiates that rank or Station wherein the Almighty has plac't him, tho' but a mean one, is truly more worthy the Estimation of all men, then he who is prefer'd to superior dignities, and abuses them: And what greater abuse than the contempt of Men below him: the relief of whose common necessities is none of the least Conditions whereby he holds all his Good things: which when that Tenure is forfeited by his default, he may justly expect some Judgment to ensue: or else that those riches whereby he prizes himself so extravagantly may shortly be taken from him.

We will not attempt to fathom the cause, or reason of Preternatural events: but certain we are, as the most Credible and General Relation can inform us, that that same night this poor Mower, and Farmer parted, his Field of Oats was publickly beheld by several Passengers, to be all of a Flame, and so continued for some space, to the great consternation of those that beheld it.

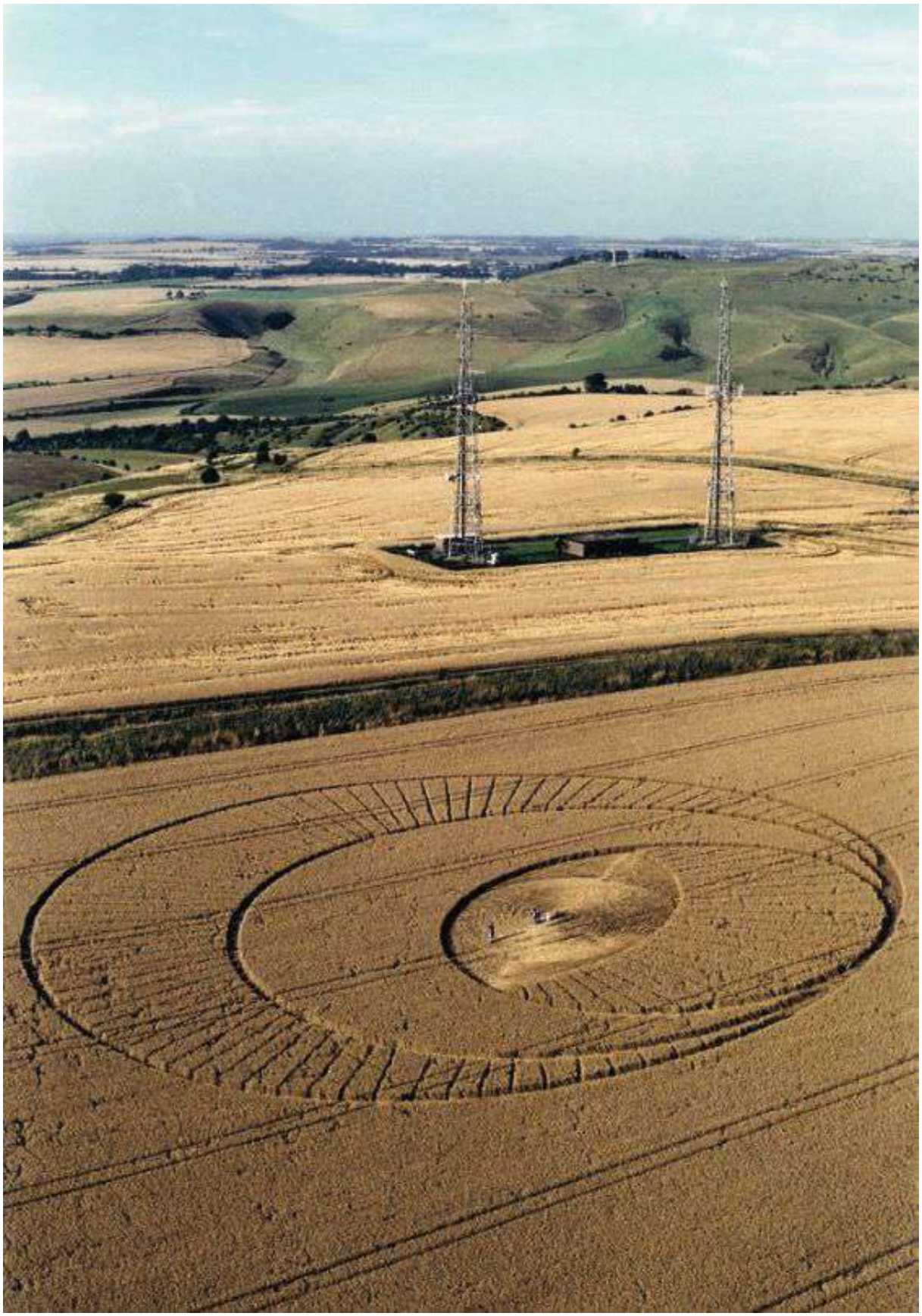
Which strange news being by several carried to the Farmer next morning, could not but give him a great Curiosity to go and see what was become of his Crop of Oats, which he could not imagin, but was totally devour'd by those ravenous Flames which were observed to be so long resident on his Acre and half of Ground.

Certainly a reflection on his sudden and indiscreet expression (That the Devil should Mowe his Oats before the poor Man should have anything to do with them) could not but on this occasion come into his Memory. For if we will but allow our selves so much leisure, to consider how many hits of providence go to the production of one Crop of Corn, such as the aptitude of Soyl, the Seasonableness of Showers, Nourishing Solstices and Salubreous Winds, etc., we should rather welcome Maturity with Devout Acknowledgments than prevent our gathering of it by our profuse wishes.

But not to keep the Curious Reader any longer in suspense, the inquisitive Farmer no sooner arriv'd at the place where his Oats grew, but to his admiration he found the Crop was Cut down ready to his hands; and as if the Devil had a mind to shew his dexterity in the art of Husbandry, and scorn'd to mow them after the usual manner, he cut them in round Circles, and plac't every straw with that exactness that it would have taken up above an Age, for any Man to perform what he did in that one night: And the man that ows them is as yet afraid to remove them.

FINIS

Windmill HIll, Avebury, Wiltshire, 15 July 2001. Copyright: Andrea Feliziani.



Morgan's Hill, Wiltshire, 3 August 2003. Copyright: Andrea Feliziani.

South Field, Alton Barnes, Wiltshire, 8 August 2003. Copyright: Andrea Feliziani.

Woodborough Hill, Wiltshire, 21 July 2004. Copyright: Andrea Feliziani.

APPENDIX B

Agobard, archbishop of Lyon

An English translation by W. J. Lewis is available online at www.fordham.edu/halsall/source/Agobard-OnHailandThunder.asp*.*

Contra insulsam vulgi opinionem de grandine et tonitruis

I. In his regionibus pene omnes homines, nobiles et ignobiles, urbani et rustici, senes et juvenes, putant grandines et tonitrua hominum libitu posse fieri. Dicunt enim, mox ut audierint tonitrua, et viderint fulgura, *Aura levatitia est*. Interrogati vero quid sit aura levatitia, alii cum verecundia, parum remordente conscientia, alii autem confidenter, ut imperitorum moris esse solet, confirmant incantationibus hominum, qui dicuntur. Tempestarii, esse levatam, et ideo dici levatitiam auram. Quod utrum verum sit, ut vulgo creditur, ex auctoritate divinarum Scripturarum probetur necesse est. Sin autem falsum est, ut absque ambiguo credimus, summopere exaggerandum est quanti mendacii reus sit qui opus divinum homini tribuit. Nam per hoc inter duo mortifera maximaque mendacia constringitur, dum testificatur hominem facere posse quod solius Dei est posse, et Deum non facere quae facit. Si vero in mendaciis minorum rerum veraciter est tenendum quod scriptum est: *Sermo obscurus in vacuum non ibit; os autem quod mentitur, occidit animam.* Et iterum: *Perdes omnes qui loquuntur mendacium.* Et: *Testis mendax peribit.* Vel: *Testis falsus non erit impunitus.* Vel etiam illud quod in Apocalypsi Joannis Apostoli legitur: *Beati qui lavant*

stolas suas, ut sit potestas eorum in ligno vitae, et portis intrent in civitatem. Foris autem canes, et venefici, et impudici, et homicidae, et idolis servientes, et omnis qui amat et facit mendacium. Quanto magis in tam gravi mendacio, ut istud ostendi potest, de quo nunc loquendum suscepimus, quod non minus aliquorum haereticorum mendaciis invenitur. Beatus Paulus apostolus dicit: *Invenimur autem et falsi testes Dei, quoniam testimonium diximus adversum Deum, quod suscitaverit Christum, quem non suscitavit, si mortui non resurgunt: nam si mortui non resurgunt, neque Christus resurrexit.* Sicut ergo omnes qui Christum Dominum resuscitatum a Patre praedicant, falsi testes Dei invenirentur, si mortui non resurgerent; sic etiam iste qui admirabile et valde terribile opus Dei Deo aufert ut homini tribuat, falsus est sine dubio testis Dei.

II. Plerosque autem vidimus et audivimus tanta dementia obrutos, tanta stultitia alienatos, ut credant et dicant quamdam esse regionem, quae dicatur Magonia, ex qua naves veniant in nubibus, in quibus fruges, quae grandinibus decidunt, et tempestatibus pereunt, vehantur in eamdem regionem, ipsis videlicet nautis aereis dantibus pretia Tempestariis, et accipientibus frumenta vel caeteras fruges. Ex his item tam profunda stultitia excaecatis, ut haec posse fieri credant, vidimus plures in quodam conventu hominum exhibere vinctos quatuor homines, tres viros, et unam feminam, quasi qui de ipsis navibus ceciderint: quos scilicet per aliquot dies in vinculis detentos, tandem collecto conventu hominum exhibuerunt, ut dixi, in nostra praesentia, tanquam lapidandos. Sed tamen vincente veritate, post multam ratiocinationem, ipsi qui eos exhibuerant, secundum propheticum illud confusi sunt, sicut confunditur fur quando deprehenditur.

III. Verum quia hic error, qui tam generaliter in hac regione pene omnium mentes possidet, ab omnibus ratione praeditis dijudicandus est, proferamus testimonia Scripturarum, per quae dijudicari possit: quibus inspectis, non nos ipsi, sed ipsa veritas expugnet stultissimum errorem, et omnes qui cum veritate sentiunt, arguant vasa erroris, dicentes cum Apostolo: *Omne mendacium ex veritate*

non est. Quod autem ex veritate non est, ex Deo utique non est; et quod ex Deo non est, verba ejus non audit; sicut ipsa per se Veritas dicit: *Qui est ex Deo, verba Dei audit. Propterea vos non auditis, quia ex Deo non estis.* Quod in alio quoque loco aliis etiam verbis dicit: *Oves meae vocem meam audiunt. Propterea vos non auditis, quia non estis ex ovibus meis*. Itemque alibi: *Omnis qui est ex veritate, audit vocem meam*. Omnis itaque qui mendacium credit, aut loquitur, aut astruit quod non est, et tenendo quidlibet quod non est, quo nisi ad non esse tendit? quia item ad non esse tendit; proculdubio ab eo qui est recedit, qui dixit Moysi: *Sic dices filiis Israel: Qui est, misit me ad vos.* Et de quo beatus Job loquitur: *Ipse enim solus est.* Atque ut apertius loquamur, veritas essentiam habet, vel potius essentia est in propria substantia, quia subsistit; mendacium vero, quia nullam habet essentiam, nihil enim est, non subsistit. Solus ergo Deus est, quia solus verum esse habet, qui non accepit ut esset. Omnes autem res ab eo creatae, et quidem sunt; sed verum et summum illud esse non habent, quia acceperunt ut essent. Porro mendacia, quia non acceperunt ut essent, nullum esse habent. Ac per hoc, is qui mendacio adhaeret, ei rei adhaeret quae non est: quanquam nec rei dicendum sit. Qui autem ei adhaeret quod non est, non solum ab eo recedit qui fecit eum, sed etiam ab eo ipso quod factus est; quoniam non amplius quam duo esse sunt; unum summum, quod suum esse non accepit ab alio; alterum magnum, quod suum esse a Deo accepit; id est, creator, et creatura. Mendacium igitur, quia non est creator, non est summum esse; quia non est creatura, non est magnum esse; quia nullam habet essentiam, non est ullum esse. Qui ergo vult persistere in eo quod est, non recedat ab eo qui ei dedit esse. Qui autem non vult recedere ab eo qui vere est, fugiat quod omnino non est, id est mendacium.

IV. Quoniam ergo omnis mendax, falsitatis assertor est, et omnis assertor falsitatis, falsus testis est, agens contra veritatem; videamus jam, isti qui opus divinum auctore homine fieri dicunt, utrum fulciantur aliqua auctoritate. In sacris igitur Scripturis, ubi primum grando introducitur, in plagis utique illis quibus Aegyptus percussa

est, invenitur. Septima denique plaga Aegypti ista est. Dixit autem Dominus: *En pluam hac ipsa hora cras grandinem multam nimis, qualisnon fuit in Aegypto a die qua fundata est, usque in praesens tempus*. In his itaque verbis Dominus se ipsum dicit missurum grandinem in crastina, non aliquem hominem, certe nec Moysen aut Aaron, qui justi et Dei homines erant, nec Jamnem et Mambrem incantatores Aegyptiorum, qui scribuntur magi Pharaonis, quos Apostolus dicit restitisse Moysi, sicut et hi resistunt veritati. Jam equidem illi, sicut scriptum est, per incantationes Aegyptias et arcana quaedam projecerant singuli virgas suas coram Pharaone, et versae fuerant in dracones, licet virga Aaron devoraverit virgas eorum. Jam aquas verterant in sanguinem, jam ranas produxerant e fluminibus, licet eas cohibere non possent, sicut Moyses in verbo Domini fecit, ut tantum in flumine remanerent. At cum ventum est ad scyniphas, et nihil inde facere potuissent, dixerunt digitum Dei sibi esse contrarium, nihilque ulterius tale conati. Certe si quilibet homo grandinem potuisset immittere, Jamnes et Mambres immisissent, quia aquas converterunt in sanguinem, et ranas de fluminibus produxerunt, quod isti facere non possunt, qui nunc dicuntur Tempestarii.

V. Sequitur autem in eodem loco Scripturae: *Extendit Moyses virgam in coelum, et Dominus dedit tonitrua et grandinem, ac discurrentia fulgura super terram, pluitque Dominus grandinem super terram Aegypti, et grando et ignis mixta pariter ferebantur.* Ecce et hic locus solum Dominum ostendit creatorem et auctorem grandinis, non aliquem hominem. Dicant forsitan isti qui hominibus hoc tribuunt, Moysen extendisse virgam in coelum, et ideo per hominem immissam fuisse tempestatem. Certe Moyses servus Domini erat bonus et justus. Isti autem eos quos dicunt Tempestarios, non audent fateri bonos esse et justos, sed malos potius, et iniquos, et dignos damnatione temporali et aeterna, sed neque servos Dei, nisi forte conditione, non tamen voluntaria servitute. Nam si ad imitationem Moysi homines essent auctores grandinis, servi utique Dei essent, non servi diaboli. Quanquam praemissae sententiae neque illos ejus demonstrant auctores, sed solum omnipotentem

Deum. Siquidem et Psalmista, qui hujus et grandinis meminit, de Deo dicit: *Occidit in grandine vineas eorum, et moros eorum in pruina, et tradidit in grandine jumenta eorum, et possessiones eorum igni*. Sed quoniam in praesenti loco addit Psalmista immissionem per angelos malos, sciendum quod vindictarum aut probationum flagella per ministros malos exerceat Deus, qui voluntatem quidem nocendi de suo habeant, potestatem autem ab illo accipiant. Sicut enim eorum propria est voluntas nocendi, sic solius Domini potestas ut possint quae volunt. Non est certe hominum potestas, neque bonorum, neque malorum, non est contrariarum fortitudinum potestas, sed solius Domini, qui earum malae voluntati tribuit potestatem, in quantum vult, et abrogat in quantum non vult ut possint. Nam et in alio quoque psalmo Psalmista sic de Deo ait: *Posuit pluvias eorum, grandinem, ignem comburentem in terram ipsorum*; et percussit vineas eorum, et contrivit lignum finium eorum. Percussit vere, et vere contrivit; sed non homo, neque angelus malus, nisi solus Deus, sine quo legio malorum angelorum neque porcos potuit nocere, et in mare praecipitare. Deus plane, de quo dicitur: *Prae fulgore in conspectu ejus nubes transierunt, grando et carbones ignis, et intonuit de coelo Dominus, et Altissimus dedit vocem suam, grandinem et carbones ignis*. Et cui cantavimus: *Fulgura coruscationem, et dissipabis eos; emitte sagittas tuas, et conturbabis eos. Qui operit coelum nubibus, et parat terrae pluviam, qui dat nivem sicut lanam, mittit crystallum suum sicut buccellas, mittet verbum suum et liquefaciet ea, flabit spiritus ejus, et fluent aquae*. Quem laudant de terra, non solum dracones abyssi, *verum etiam ignis, grando, nix, glacies, spiritus procellarum, quae faciunt verbum ejus*; non verbum hominis, non verbum angeli mali.

VI. Legimus etiam de grandine in libro Jesu Nave ita: *Congregati igitur ascenderunt quinque reges Amorrhaeorum, rex Hierusalem, rex Hebron, rex Hierimot, rex Lachis, rex Eglon, simul cum exercitibus suis, et castrametati sunt contra Gabaon, oppugnantes eam*. Et post pauca: *Dixitque Dominus ad Josue: Ne timeas eos. In manus enim tuas tradidi illos*. Et post pauca: *Cumque fugerent filios (Israel), et essent in descensu Bethoron, Dominus misit super eos*

lapides magnos de coelo usque Azecha; et mortui sunt multo plures lapidibus grandinis, quam quos gladio percusserant filii Israel. Ecce ergo et in hoc loco apparet, sine ulla imprecatione hominum Dominum misisse grandinem super eos, quos tali flagello dignos judicavit. Nam si mali homines, sicut sunt quos isti errantes nominant Tempestarios, id facere potuissent, super filios utique Israel fieret grando, non super adversarios illorum. Sed quia nec mali super bonos, nec boni super malos hoc facere possunt, evidentissime in hac sententia declaratur. Quod et liber quoque Sapientiae attestatur, dicens Domino: *Tuam manum effugere impossibile est. Negantes enim nosse te impii, per fortitudinem brachii tui flagellati sunt novis aquis, et grandinibus et pluviis persecutionem passi sunt, et per ignem consummati. Quod enim mirabile erat, in aqua, quae omnia exstinguit, plus ignis valebat. Vindex est enim orbis justorum*. Et post pauca: *Nix autem et glacies sustinebant vim ignis, et non tabescebant; ut scirent quoniam fructus inimicorum exterminabat ignis ardens, in grandine et pluvia coruscans.*

VII. Si igitur omnipotens Deus per fortitudinem brachii sui flagellat inimicos justorum novis aquis et grandinibus et pluviis, cujus manum effugere impossibile est, omnino ignorantiam Dei habent qui haec homines facere posse credunt. Nam si homines grandinem immittere possent, utique et pluvias possent. Nemo enim grandinem sine pluvia unquam vidit. Possent quoque de inimicis suis se vindicare, non solum ablatione frugum, sed et vitae ademptione. Quando enim contingit inimicos Tempestariorum esse in itinere aut in agris, ut eos occiderent, possent multiplicatam grandinem super eos in unam congeriem fundere, et obruere illos. Nam et hoc quidam dicunt, nosse se tales Tempestarios, qui dispersam grandinem, et late per regionem decidentem, faciant unum in locum fluminis aut silvae infructuosae, aut super unam, ut aiunt, cupam, sub qua ipse lateat, defluere. Frequenter certe audivimus a multis dici quod talia nossent certe in locis facta; sed necdum audivimus ut aliquis se haec vidisse testaretur. Dictum est mihi aliquando de aliquo, quod se haec vidisse diceret. Sed ego multa sollicitudine egi ut viderem illum, sicuti et feci. Cum autem loquerer cum illo, et tentaret dicere se ita vidisse, ego

multis precibus et adjurationibus cum divinis etiam comminationibus obstrinxi illum rogitans, ut non diceret illud nisi quod verum esset. Tunc ille affirmabat quidem verum esse quod dicebat, nominans hominem, tempus et locum; sed tamen confessus est se eodem tempore praesentem non fuisse. Item in libro Ecclesiastici, qui praenotatur Jesu filii Sirach, scriptum est: *Sunt spiritus qui ad vindictam creati sunt, et in furore suo confirmaverunt tormenta sua, et in tempore consummationis effundent virtutem, et furorem ejus, qui fecit illos, confundent. Ignis, grando, fames, et mors, omnia haec ad vindictam creata sunt. Bestiarum dentes, et scorpii, et serpentes, et romphaea vindicans in exterminium impiis*. Si igitur grando creata est, sicut et caetera quae hic dicuntur, a Deo utique creata est, non ab homine. Item in praedicto libro scriptum legimus: *Vide arcum, et benedic qui fecit illum. Valde speciosus est in splendore suo. Gyravit coelum in circuitu gloriae suae, manus Excelsi aperuerunt illum. Imperio suo acceleravit nivem, et accelerat coruscationes emittere judicii sui. Propterea aperti sunt thesauri, et evolaverunt nebulae, sicut aves. In magnitudine sua posuit nubes, et confracti sunt grandinis lapides. In conspectu ejus commovebuntur montes, et in voluntate ejus aspirabit notus. Vox tonitrui ejus verberabit terram, tempestas aquilonis, et congregatio spiritus; et sicut avis deponens ad sedendum aspergit nivem; et sicut locusta demergens descensus ejus. Pulchritudinem coloris ejus admirabitur oculus, et super imbrem ejus expavescet cor. Gelu sicut salem effundet super terram; et cum gelaverit, fiet tanquam cacumina tribuli. Frigidus ventus aquilo flabit, et gelabit crystallus ab aqua, super omnem congregationem aquarum requiescet, et sicut lorica induet se aquis. Devorabit montes, et exuret desertum, et exstinguet viride, sicut ignem. Medicina omnium in festinatione nebulae, et ros obvians ab ardore venienti humilem efficiet eum. In sermone ejus siluit ventus, cogitatione sua placabit abyssum, et plantabit illum Dominus Jesus.*

VIII. Ecce in hac magna et prolixa Ecclesiastici libri sententia, cum subtilissima admiratione imperio Dei tribuitur quidquid in aere fit, quidquid de aere in terram descendit, quidquid mari et ventis; apparitio, splendor, et gyrus arcus; festinatio nivis, terror

coruscationis, velocitas nebulae, suspensio ventorum, verberatio terrae, concertatio aurarum, congelatio aquae, non solum in nubibus, sicut grandinis et nivis, sed etiam in terra, nivium, pluviae, et stantium aquarum, vel fluminum discurrentium, et ex gelu desiccatio viridium rerum, sicut saepe videmus, necnon et horum omnium resolutio, quae fit tempore rorantium nebularum, et flatibus austri, et favoni. Ad sermonem quoque Dei dicit omnia ista conquiescere et placari. Non ergo in talibus adjutor homo quaeratur, quia non invenietur, nisi forte sancti Dei, qui multa obtinuerunt, et obtenturi sunt: quorum aliqui potestatem habebunt claudere coelum, ne pluat diebus prophetiae ipsorum, sicut Elias, et aquas convertendi in sanguinem, et percutere terram omni plaga, quotiens voluerint, sicut Moyses et Aaron Aegyptum. Vere non alius mittit grandinem tempore aestatis, nisi qui et nives tempore hiemis. Nam et utriusque una est ratio ut fiat, quando nubes utroque tempore solito altius elevantur.

IX. In libro quoque beati Job scriptum est: *Ab interioribus egredietur tempestas, et ab arcturo frigus. Flante Deo concrescit gelu, et rursum latissime funduntur aquae. Frumentum desiderat nubes, et nubes spargunt lumen suum; quae lustrant cuncta per circuitum quocunque eas voluntas gubernantis Dei duxerit, ad omne quod praeceperit illis super faciem orbis terrarum*. Attente audiendum quod dicitur: Lustrant nubes per circuitum cuncta, sed quocunque eas voluntas gubernantis Dei duxerit. Si ergo Deus eas gubernat, non potest homo iniquus eas aliam in partem convertere, quia nec imperare Deo potest, nec precibus obtinere meretur. Quod autem subjungitur, *ad omne quod praeceperit illis super faciem orbis terrae*, quid aliud intelligendum, nisi ad omne quod praeceperit Deus nubibus, vel ad flagellum, vel ad subsidium humanum, ad nives, ad grandines, ad pluvias, ad fulgura, vel fulmina, sive tonitrua, ex quibus plerumque alta aedificia prosterni solent? Sane non praecepto hominis, sed praecepto Dei, sicut in hac sententia legitur, in qua etiam post paululum subditur: *Nunquid scis quando praeceperit Deus pluviis ut ostenderent lucem nubium ejus? Nunquid nosti semitas nubium magnas, et perfectas scientias?* In quibus verbis hoc quoque notandum est, quia si homo non novit semitas

nubium, nec perfectas earum scientias, multo minus novit earum officio hominibus prodesse vel obesse; exceptis, ut dictum est, sanctis, qui secundum voluntatem Dei multa per illum ipso donante possunt, non utique propria aut aliqua contraria virtute, sed voluntate conditoris: sicut saepe multi servorum Dei orationibus obtinuerunt, ut tempore siccitatis pluvias Dominus largiri dignaretur.

X. Sic enim beatus Jacobus apostolus, factum Eliae prophetae in exemplum nobis proponens, exhortatur nos ad orationem recurrere pro tristitia, pro infirmitate, pro remissione peccatorum, dicens: *Orate pro invicem ut salvemini. Multum enim valet deprecatio justi assidua. Helias homo erat similis nobis, passibilis; et orationem oravit ut non plueret, et non pluit annos tres et menses sex. Et rursum oravit: et coelum dedit pluvias, et terra dedit fructum suum*. Elias itaque orationem oravit ut non plueret, et non pluit annos tres menses sex. Fecit autem hoc propter correptionem et correctionem gentis suae, id est, ut prius corriperentur de aversione mentis, eo quod dereliquissent cultum Dei omnipotentis, et post sordes idolorum abirent, et postea flagellati et fatigati, exspectatione pluviarum corrigerentur, et redirent ad Dominum Deum quem dereliquerant.

XI. Sic etiam Samuel propheta, et dux populi Israel, cum corriperet eumdem populum propter frequentissimas transgressiones illorum, replicans eis beneficia Dei omnipotentis, et eorum e contrario aversiones, intelligeret idem populus grande malum se fecisse, et Deum offendisse in petendo sibi regem, orando obtinuit ut insueto tempore terribiliter cum tonitruis et coruscationibus pluvia (caderet). Sic denique scriptum est dixisse populo Samuelem: *State, et videte rem istam grandem quam facturus est Dominus in conspectu vestro. Nunquid non messis tritici est hodie? Invocabo Dominum, et dabit voces, et pluvias; et scietis et videbitis quia grande malum feceritis vobis in conspectu Domini, petentes super vos regem. Et clamavit Samuel ad Dominum, et dedit Dominus voces et pluviam in die illa; et timuit omnis populus nimis Dominum et Samuelem. Dixitque universus populus ad Samuel: Ora pro servis tuis ad Dominum Deum tuum, ut non moriamur. Addidimus enim universis peccatis*

nostris malum, ut peteremus nobis regem. Territi enim vocibus tonitruum et coruscis fulgurum, intercessionem sancti prophetae, licet peccatores, tamen ut fideles postularunt; non sicut isti nostri semifideles, qui mox ut audiunt tonitrua vel cum levi flatu venti, dicunt *Levatitia aura est*, et maledicunt dicentes: *Maledicta lingua illa, et arefiat, et jam praecisa esse debebat quae hoc facit*. Dic, rogo, cui maledicis? justo, an peccatori? Peccator namque, et ex parte infidelis similis tui, auram, ut dicere soletis, levare non potuit; quia nec virtute sua valuit, nec angelis malis imperare potuit: quanquam nec eorum in hac re sit potestas. Domino non supplicavit, ut orando id obtineret: quia sicut vos, ita et illi quos tempestarios putatis, praestigiis malis fieri haec putant, non voluntate Dei: licet etsi a Domino Deo hoc peterent, non mererentur adipisci: quod utique justorum est, non iniquorum: qui in talibus rebus, etsi petunt a Domino aliquid, infideliter et duplici animo petunt, non in certitudine fidei.

XII. Illo praeterea tempore quando oratione Eliae siccitas erat in terra Israel, etiam pascua pecoribus negabantur. Scriptum est enim: Dixit Achab ad Abdiam: *Vade in terram ad universos fontes aquarum, et in cunctas valles, si forte invenire possimus herbam, et salvare equos et mulos, et non penitus jumenta intereant.* Ecce, ut apparet, de pluvia desperati quod non esset nisi juxta Eliae verba, pro jumentis herbas quaerunt juxta fontes et rivos aquarum, jam enim sentiebant verum esse quod ipsi Achab Elias dixerat: *Vivit Dominus Deus Israel, in cujus conspectu sto, si erit annis his ros et pluvia, nisi juxta oris mei verba.* Et certe Elias annos dixit quanti essent. Iste ergo Achab, ut dixi, quare non rogavit Tempestarios ut levarent tempestates, et, ut dicere soletis, auras levatitias, per quas irrigata terra habere posset herbas equis et mulis suis caeterisque jumentis, pro quibus sollicitus erat; maxime quia non timebat perdere fruges in campis, et vineas, quae nullae omnino tunc erant?

XIII. Nostris quoque temporibus videmus aliquando, collectis messibus et vindemiis, propter siccitatem agricolas seminare non posse. Quare non obtinetis apud Tempestarios vestros ut mittant

auras levatitias, quibus terra irrigetur, et postea seminare possitis? Verum quia id vos nec fecistis, nec facere unquam vidistis et audistis, audite nunc quid ipse Dominus, rerum omnium conditor, rector, gubernator, ordinator et dispensator, servo suo beato Job inter caetera etiam de hujusmodi rebus dicat. Etenim cum diabolus, inventor mali, princeps et caput omnium malorum, accusator fratrum, accusasset beatum Job apud Dominum, dicens quod non recta intentione, id est, soli ei placendi, et solo eo fruendi illi serviret, sed pro terrenarum rerum multiplicatione ac defensione; expetiissetque eum tentandum, quatenus tentando ita verum esse ostenderet; improbus, superbus, et stultissimus, quasi mentem viri Dei melius nosset quam conditor ejus; Dominus quoque justus et misericors, justus ad confundendum diabolum, misericors ad exaltandum fidelem famulum suum, concessit illi potestatem, primum quidem in rebus omnibus, deinde vero in filiis, post etiam in salute corporis, ac deinceps in suasione conjugis, postremo autem in exprobratione et multifaria despectione famulorum. Sed diabolus victus et confusus recessit; servus Domini victor et triumphans excrevit. Volens igitur pius Dominus secundum quod Apostolus dicit de se ipso, ne magnitudo eum revelationum extolleret, ita et illum, ne magnitudo victoriae elatum redderet, humiliare, non ablatione rerum quas perdiderat, non percussione corporis, per quam jam sicut aurum in camino examinatus erat, non comparatione alicujus magni viri, quia similis ei super terram nullus erat, quippe qui inter homines Orientales magnus esset, coepit tamen eum humiliare vehementer, sublimiter ostendendo illi immensitatem potentiae suae, ut fidelis famulus cognoscendo inaestimabilis atque incircumscripti conditoris ineffabilia magnalia, semetipsum despiceret, et despiciendo inclinaret, sicuti et factum est. Nam hoc in verbis ejus apparet, quibus ait: *Idcirco ipse me reprehendo, et ago poenitentiam in favilla et cinere*. Quod alia translatio apertius declarat, dicens: *Despexi memetipsum, et distabui, et aestimavi me terram et cinerem*. In hac ergo humiliatione, cum omnipotens Deus sciscitaretur fidelem famulum, utrum ista aut illa facere posset aut nosset quis fecerit, aut ubi esset quando fiebant, interrogat de talibus utique quae nemo alius nisi solus omnipotens facere potest, et dicit: *Ubi eras quando*

ponebam fundamenta terrae? Et: *Quis posuit mensuras ejus, vel super quo bases illius solidatae sunt?* Quis conclusit ostiis mare? Et: *Nunquid conjungere valebis micantes stellas, Pleiades, aut gyrum Arcturi poteris dissipare?* Et: *Nunquid nosti ordinem coeli?* Et: *Nunquid mittes fulgura, et ibunt?* et multa hujusmodi. Inter haec, inquam, tanta ac talia, inquirit etiam ab eo dicens: *Nunquid ingressus es thesauros nivis, aut thesauros grandinis aspexisti, quae praeparavi in tempus hostis, in diem pugnae et belli? Per quam viam spargitur lux, dividitur aestus super terram? Quis dedit vehementissimo imbri cursum, et viam sonantis tonitrui? ut plueret super terram absque homine in deserto, ubi nullus mortalium commoratur? ut impleret inviam et desolatam, et produceret herbas virentes? Quis est pluviae pater? vel quis genuit stillas roris? De cujus utero egressa est glacis? et gelu de coelo quis genuit? In similitudinem lapidis aquae durantur, et superficies abyssi constringitur.*

XIV. Ecce igitur opera Dei magna, quorum rationem nec ipse beatus Job tam sublimiter, tam subtiliter antea poterat admirari. Si Dominus thesauros habet grandinis, et solus eos aspicit, quos beatus Job necdum aspexerat, ubi eos invenerunt isti Tempestarii, quos beatus Job non invenit, neque invenire possumus, sed neque aestimare ubi inveniantur? Dominus interrogat fidelem famulum, utrum sciat quis dederit vehementissimo imbri cursum, et viam sonantis tonitrui. Isti autem contra quos sermo est, ostendunt nobis homunculos a sanctitate, justitia, et sapientia alienos, a fide et veritate nudos, odibiles etiam proximis, a quibus dicant vehementissimos imbres, sonantia aquae tonitrua, et levatitias auras posse fieri. Dominus dicit se haec praeparasse in tempus hostis, id est, ad vindictam. Isti eosdem ipsos hostes atque adversarios aequitatis (in quibus quam maxime, post eos qui terminos transferunt, auferunt pro pignore bovem viduae, lacertos pupillorum comminuunt, nudos dimittunt homines quibus non est operimentum, egenos educunt de domibus eorum, homines contristant, vindicandum est) dicunt eorum habere potestatem, quae Dominus ad vindictam hostium suorum praeparavit. Dominus se dicit pluviae patrem, et gelu de coelo se

generasse confirmat. Isti miserrimos hominum dicunt habere magnam portionem hujus dispensationis. Quod in similitudinem lapidis aquae durantur, Dominus nobis mirandum proponit. Hoc si ad libitum miserrimorum horum hominum aliquando fieri posset, procul dubio mirandum non esset.

XV. Haec stultitia est portio non minima infidelitatis; et in tantum malum istud jam adolevit, ut in plerisque locis sint homines miserrimi, qui dicant se non equidem nosse immittere tempestates, sed nosse tamen defendere a tempestate habitatores loci. His habent statutum quantum de frugibus suis donent, et appellant hoc canonicum. Multi vero sunt qui sponte sacerdotibus decimam nunquam donant, viduis et orphanis caeterisque indigentibus eleemosynas non tribuunt, quae illis frequenter praedicantur, crebro leguntur, subinde ad haec exhortantur, et non acquiescunt. Canonicum autem quem dicunt, suis defensoribus (a quibus se defendi credunt a tempestate) nullo praedicante, nullo admonente, vel exhortante, sponte persolvunt, diabolo inliciente. Denique in talibus ex parte magnam spem habent vitae suae, quasi per illos vivant. Hoc non est portio, sed fere plenitudo infidelitatis, et si diligenter consideramus, absque ambiguo pronuntiabimus id plenitudinem esse infidelitatis. Tres namque virtutes sunt, secundum Scripturas divinas, in quibus totus comprehenditur cultus, per quas colitur Deus, id est, fides, spes, charitas. Quicunque igitur fidem et spem suam partitus fuerit, ut ex parte credat in Deum, ex parte credat hominum esse quae Dei sunt, et ex parte speret in Deo, ex parte autem speret in homine, hujus profecto fidem et spem divisam non accipit Deus; ac per hoc inter fideles censeri non potest; et quem partita fides et spes a numero fidelium secernit, vorago procul dubio infidelitatis absorbet; meritoque talis maledictum illud incurrit prophetae dicentis: *Maledictus homo qui spem suam ponit in homine*. Neque vero blandiatur sibi dicens: Magis spero in Deo quam in homine: quia spes per partes dividi non potest. Aut enim tota erit, et tuta; aut intuta erit, et nulla.

XVI. Ante hos paucos annos disseminata est quaedam stultitia, cum esset mortalitas boum, ut dicerent Grimaldum ducem Beneventorum transmisisse homines cum pulveribus, quos spargerent per campos, et montes, prata, et fontes, eo quod esset inimicus Christianissimo imperatori Carolo, et de ipso sparso pulvere mori boves: propter quam causam multos comprehensos audivimus, et vidimus, et aliquos occisos, plerosque autem affixos tabulis in flumen projectos, atque necatos. Et, quod mirum valde est, comprehensi, ipsi adversum se dicebant testimonium, habere se talem pulverem, et spargere. Ita namque diabolus, occulto et justo Dei judicio, accepta in illos potestate, tantum eis succedere valebat, ut ipsi sibi essent testes fallaces ad mortem; et neque disciplina, neque tortura, neque ipsa mors deterrebat illos, ut adversum semetipsos falsum dicere non auderent. Hoc ita ab omnibus credebatur, ut pene pauci essent quibus absurdissimum videretur. Nec rationabiliter pensabant unde fieri posset talis pulvis, de quo soli boves morerentur, non caetera animalia: aut quomodo portari posset per tam latissimas regiones, quas superspargere pulveribus homines non possunt, nec si Beneventani viri et feminae, senes et juvenes, cum ternis carris pulvere carricatis egressi de regione fuissent. Tanta jam stultitia oppressit miserum mundum, ut nunc sic absurde res credantur a Christianis, quales nunquam antea ad credendum poterat quisquam suadere paganis creatorem omnium ignorantibus. Hanc itaque rem propterea ad medium deduximus, quia huic unde loquimur similis est, et vel exemplum poterat tribuere de inani seductione et vera sensus diminutione.

EXPOSED: Two artists admit they pulled off the great corn circles hoax for 13 years

MEN WHO CONNED THE WORLD

JOKER: Doug Bower

JOKER: Dave Chorley

THE mysterious corn circles that baffled scientists around the world are a gigantic hoax, TODAY can reveal.

Two British artists have been secretly creating them for 13 years while a multi-million industry to explain the markings built up around them.

Corn circle expert Patrick Delgado admitted last night: "We have all been conned. Thousands of lives are going to be wrecked over this."

The artists not only fooled Mr Delgado, author of £3 million worth of international best-selling books on the phenomenon. They also managed to trick investigators across the world including:

EXCLUSIVE
by GRAHAM BROUGH

- Japanese scientists who came to Britain with £5 million for research
- Government departments and military top brass who held special inquiries and
- Farming organisations who were assisting research.

The circles are nothing more mysterious than the work of two jovial conmen in their 60s – Doug Bower and David Chorley.

An incredulous Mr Delgado listened in disbelief when TODAY brought him face to face with the men who had fooled him. Doug told him: "My biggest regret is sitting here knowing you have done all that hard work all these years."

Mr Delgado said: "What does make me upset is the thousands of people whose lives are going to be shattered because of this, if everything you say is true. I'll look a fool."

But he told his tormenters: "I admire your courage for coming forward. I find this quite hilarious really. It's quite a relief it is all over."

He told the con artists: "You've done so much good in this world, you have brought millions of people together over this.

"Thousands have said that the corn circles have changed their

Turn to Page 2

APPENDIX C

Paul Fuller: The Crop Watcher

The following are full and verbatim transcripts of Paul Fuller's essays as published in *The Crop Watcher* between 1990 and 1994.

Editorial

(by Paul Fuller)

[excerpt from *The Crop Watcher,* Issue number 1, September/October 1990]

Welcome to the first edition of "The Crop Watcher", a new magazine devoted entirely to documenting the increasingly bizarre phenomenon of the crop circles. The aim of "The Crop Watcher" will be to offer the public an alternative view of the phenomenon to that currently being promoted by most mainstream media sources that the circles are the result of a paranormal force. Our task will be to challenge the views and theories being expressed by many of the self-proclaimed crop circle experts and to examine the way in which the media portray the subject as a supernatural myth. "The Crop Watcher" intends to challenge this state of affairs and to demand that the public be better informed and educated about what is very clearly a beautiful natural anomaly.

All shades of opinion will be carried in this magazine and editorial control over what is and what is not published depends entirely on the size of the bribe offered by correspondents. Our aim is to inform,

entertain and comment on what is happening in our fields for posterity. Whether you believe that space aliens create circles or that the whole thing is some kind of cosmic joke, “The Crop Watcher” is YOUR magazine and we hope to reflect your interests and concerns. If you don’t like what we print, write in and have your say. First though, a few ground rules :-

1. Correspondence is always welcome but readers are warned that the Editorial Team is utterly swamped with letters, reports of circles (500 so far this year), media commitments and other assorted buffoonery, so PLEASE be patient when your letters to us go unanswered or when your edition of “The Crop Watcher” fails to make its regular bi-monthly appearance on your doormat. We are producing this magazine because we believe we have something important to contribute to the ongoing debate about the nature of this fascinating phenomenon, but please remember that everything is done in our own free time (what’s left of it) and at our own expense.

2. “The Crop Watcher” deals with an emotive subject that has been cynically manipulated by the mass media to promote a supernatural myth. Indeed, some would say that the politics of crop circles research already makes “Dallas” look like a children’s birthday party. For this reason some of the items carried in this magazine will be contentious, beneath-the-belt, and generally provocative. We make no apologies for this state of affairs and emphasise that comments submitted by individual writers do not necessarily reflect the views and beliefs of the Editorial Team. Any threats of litigation will be dealt with in the customary manner, i.e. by offering one penny for damages and throwing the writ in the bin. None of us have any money anyway so potential litigants beware, we’re not worth suing !! Furthermore no researchers with outstanding threats of litigation against other researchers will be allowed to contribute to “The Crop Watcher” as we believe in the right to free speech and will defend the right to disagree as a matter of principle. Readers who feel abused by us have the right to a full right of reply (provided its short, to the

point and not too libellous). Victims should write to us at the editorial address above in outraged tones to complain.

We begin our veiled attempt at world domination with the following:-

A Review of the Summer 1990 Edition of “The Cereologist”
(Published by the Centre for Crop Circle Studies)

The other day someone finally sent me a copy of “The Cereologist”. No, this isn’t a new breakfast cereal, but the official new magazine for the Centre for Crop Circle Studies. After waiting almost six months it was nice to finally get my hands on this “fanzine” and see what all the fuss was about. Judging by the amount of favourable press coverage achieved by the Centre I had high hopes that this would be the beginning of a concerted attempt to bring some kind of rationality to the subject. Furthermore, with so many well known crop circle researchers involved, surely I thought we would finally see a proper analysis of the dozen eye witness accounts of crop circles actually forming, a list of all those meteorologists prepared to publicly support Meaden’s theory and a map showing all the pre 1980 circle events that lay away from the so-called “Wessex Triangle” (see Chapter 9 of “Crop Circles A Mystery Solved” Ralph). Imagine my disappointment when I turned the pages of this better-late-than-never publication only to find articles discussing mystical demons, somebody losing their pendulum (not as exciting as I initially thought) and mystical entities communicating with circle watchers in isolated barns ! With subject matter like this I just hold up my hands in horror at the future for circles research.

[my concern turned out to be quite justified !]

The Cereologist (Ugh !) is certainly a high quality publication, but regretfully this only applies to the standard of the cartoons and illustrations. Priced at £ 2.50 per copy and published “thrice yearly” (they mean every four months) readers are treated to a fascinating but slightly eccentric ramble through twenty A4 pages of myths and

mysteries without any real discussion of the facts or the critical issues (e.g. there is only one mention of an eye witness account of a crop circle actually forming before witnesses in the whole of this first issue). Perhaps in my youthful optimism I was expecting too much, but then I should have realised that the Editor, John Michell (one-time author of “The View Over Atlantis”), makes his own sympathies abundantly clear in his unbridled support for “Circular Evidence” on the back cover (“Their approach is none the less impeccably scientific”. Honestly, I nearly cried).

Michell’s first Editorial begins by introducing all the leading members of the CCCS, names that will already be known to many. Strangely, no mention is made of the links that some of these researchers have with “Flying Saucer Review”, a magazine that recently promoted the view that AIDS is a disease introduced to the Earth by Aliens, that the suspicious deaths of defence scientists is associated with the “something that is so busily creating circles in Hampshire” and which apparently believes that “good” public library books on UFOs are being secretly spirited away by a secret government plot in order to dupe the public into dismissing the fact that “genies” are riding around in spaceships controlling international affairs. I was even more surprised to read that Michael Green of English Heritage is described as a “thorough-going mystic” and wonder how those of us who deny a mystical solution will be described when one of the Centre’s leading lights is introduced in such derogatory fashion. I needn’t have worried, as the journal is completely devoted to making unnecessary jibes at any researcher who dares to suggest a meteorological explanation. Small wonder that Terence Meaden allows himself to be promoted as an affiliated organisation (on page 17) after the fearful slagging aimed at him and his supporters throughout this journal.

Despite these failings Michell begins admirably enough by stating that the function of the Centre for Crop Circle Studies is to “encourage all types of research into the crop circle mystery, to provide a centre for communication between all researchers, to

collect and collate information from all sources and to publish scientific assessments of the phenomenon as it develops season by season." These are honourable sentiments that we entirely endorse at "The Crop Watcher".

We hope that both magazines will engage in a lively debate about the nature of the evidence surrounding Meaden's theory and its implications for the UFO phenomenon and other Fortean events in general. Michell can begin this debate by discussing the dozen eye witness accounts of crop circles actually forming before witnesses (which his magazine so studiously avoids discussing in its promotion of the phenomenon).

Michell goes on to boldly claim that "Our Journal for Crop Circle Studies stands aloof from the quarrels of the certainty-mongers" and that "We are receptive to the news, views and theories of any group of individual who is engaged in these studies". Despite these laudable aims Michell quickly restricts contributions to only those researchers who adopt a "curteous expression" (i.e. those who agree with his own views) and emphasise that "This subject is far too important to be treated frivolously or to be reduced to the level of personal recriminations" (precisely). Strange how despite these honourable sentiments Michell then allows a whole host of contributors to ruthlessly castigate Meaden, Fuller and Randles with a cascade of cheap, unpleasant and over-emotional jibes at researchers who simply hold different opinions to those held by his contributors. Of course, with an emotive subject like the crop circles, this is only to be expected, but in Michell's case this policy seems to have affected the objectivity of some of the material being presented. Let's examine some examples.

1. On page 3, when discussing the first "dumbbell" formation at Chilcomb, George Wingfield comments that "the new formation type, never previously recorded anywhere in the world (oh really ?), must have been extremely uncomfortable for Dr Meaden and his "plasma-vortex" theory (why ?). Quite plainly the rectangles could not have

been caused by circulating air or plasma (why not ?) and one felt it rather tactless to ask why these had never been seen previously (how do you know that they'd never been seen previously ? Have you searched for historical precedents ?). Within the next few weeks these features reappeared again and again (precisely, an important clue here !) and the basic dumb-bell pattern has been repeated at least five times at the time of writing. Any possible suggestion that these pictogram formations are caused by random meteorological effects seems totally ludicrous (but they're NOT "random meteorological effects" George)."

2. On page 8, when reviewing the 1990 Oxford Conference (organised by TORRO), Ralph Noyes comments "It did not seem to many of us that the visiting experts actively supported the Plasma Vortex hypothesis (did you bother to ask them ? What about the four Professors of meteorology who flew in from America and Japan to support Meaden's theory ?)" and later "None of us had any doubt, however, about Terence Meaden's courageous attempt to fit the phenomenon to terms which he would call "rational", even if for the time-being his eleven-year-old endeavours seem to many of us to rest more on faith of what may be happening (so how about the dozen or so eye witness accounts of wind vortices creating circles then ?)."

3. Michell then extends himself on page 18 in his second attempt at trying to review the three crop circle books of 1989. Ignoring the appalling errors of fact and ridiculous blunders in Andrews and Delgados' "definitive" book "Circular Evidence", Michell takes one almighty swipe at those of us who dare to suggest a meteorological explanation for the phenomenon by stating that :-

"Fuller and Randles have committed themselves to denying the novelty of the crop circle phenomenon (???) and its apparently overwhelming preference for Wiltshire and neighbouring countries (eh?)". Not only does Michell fail to point out that circles regularly appear away from the Wessex area (see article on the Bulkworthy

“pictogram” later in this issue) but he also omits to point out that we believe we can fully account for this clustering effect with reference to recognised meteorological factors. Michell goes on :-

“Perhaps, like Meaden, they should be more agile in adapting their theories to the data rather than the other way round.” (pretty aloof from quarrels eh !)

We wonder why Michell repeatedly charges us with being wrong about the crop circles (what a terrible crime) and how he can possibly suggest that we are bending the evidence to fit the theory when so many people are coming forward and saying that they are SEEING crop circles being created by meteorological mechanisms.

Michell goes on to claim that we are “curiously determined to dissociate UFOs from crop circles”. Of course, this whole issue depends entirely on what is meant by that term U.F.O., but again perhaps Michell should read our new book “Crop Circles, A Mystery Solved (?)” where we claim that (some) U.F.O.s and (some) crop circles are BOTH created by the same natural meteorological process (the Meaden vortex). Regretfully, it is evident from much of the material in “The Cereologist” that U.F.O.s are promoted as intelligently controlled devices (WHEN will they learn ?) rather than natural atmospheric events on the threshold of scientific knowledge. It seems that some researchers never give up in this external quest to discover an “intelligence” behind novel natural phenomena.

Turning to page 19 I was concerned to see the sorts of groups that the Centre is affiliated to. Remember, we have a real physical phenomenon occurring which is being created by a real physical effect, so why does the Centre for Crop Circle Studies need to affiliate to groups as mystically inclined as the Fountain Group (who believe in intelligently-controlled earth forces) or “The College of Psychical Studies” ? Somebody please tell me what on earth crop circles have to do with psychic phenomena and why such esoterically minded groups are considered appropriate to be

affiliated to a group that is supposed to be finding an explanation for the phenomenon rather than encouraging a supernatural myth ? If this wasn't bad enough, I was incensed at the way in which the Mowing Devil case (page 13) was promoted as if this had been discovered by one researcher and one researcher alone. As everyone knows, it is a matter of public record that three independent researchers [Jenny Randles, Andy Roberts, Bob Skinner] all discovered the existence of the Mowing Devil woodcut [from 1678] at about the same time, so why are these other researchers omitted from Michell's presentation of the case ?

Turning back to the front cover, Terence Meaden is introduced as "the leading contender" for the Koestler Foundation prize of £ 5,000 for the first person who provides the first "definitive" explanation for the crop circles. This ill-thought-out competition - already known to have encouraged at least one crop circle hoax - is given prime prominence on the front cover of "The Cereologist", yet despite this apparent praise Michell states that Meaden's theory is "rejected by most other cereologists" and that "it has been considerably strained by the events of this year". Of course, this depends entirely on who is meant when Michell talks about "other cereologists" but we can be quite sure that this comment doesn't extend to the two dozen meteorologists and atmospheric physicists I now have on record who support a meteorological explanation for the crop circle phenomenon or who are at least prepared to consider it. Nor are we told why the events of 1990 have "considerably strained" the meteorological theory, but then perhaps this issue isn't considered important enough by the Editor of "The Cereologist" when there are other, apparently more interesting developments to discuss (e.g. the discovery of the "intelligently produced designs" or the observation of "hundreds of black rod-like things that jumped up and down above the top of the crop" - do they mean crows ?).

Inevitably "The Cereologist"'s discussion of the 1990 crop circles centres on the Alton Barnes formation (as if this was representative of all known circle events throughout history), contending that "These

novelties seem to have put paid to all mundane explanations" (oh really ? How about hoaxing ?). Going on to quote a source of impeccable authority (the "Today" newspaper for July 20th) Michell establishes that current rumours circulating about ancient Sumarian texts originated from one Charles D'Orban of the School of African and Oriental Studies. "The Crop Watcher" will be contacting d'Orban to examine the true extent of the "Sumarian connection". If it is true that the 1990 formations have "historical precedents" in ancient Sumarian texts this would be crucially important evidence that deserves careful documentation.

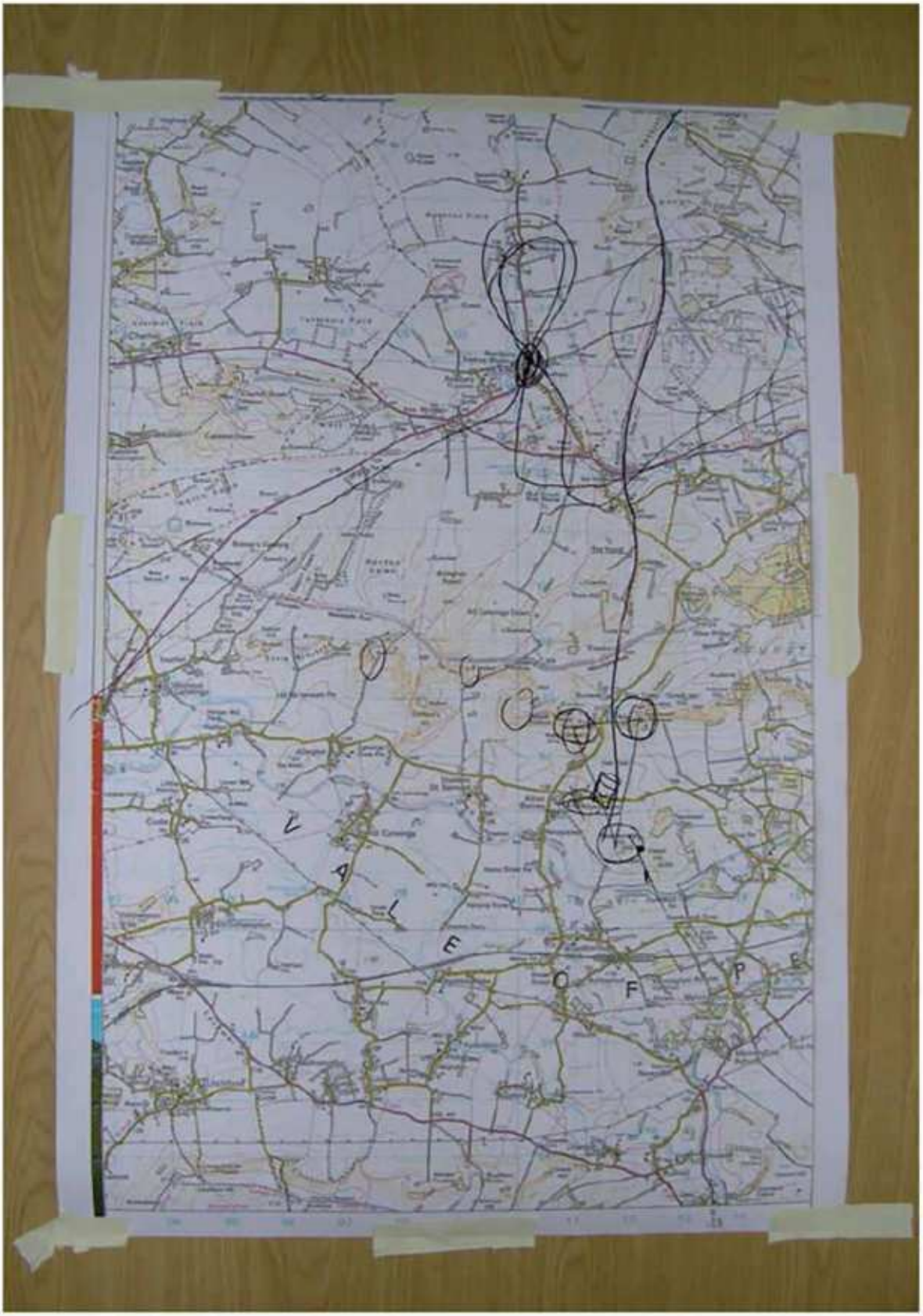
[postscript : The Crop Watcher wrote to the School of African Studies about these claims but received no reply].

Michell predictably gives some prominence to the case of the "sprouting ring", claiming that "In May this year a large formation, a circle surrounded by three concentric rings, was photographed near Devizes. A second photograph was taken days later. It showed that a fourth, outer ring had mysteriously been added to the pattern. With these and other marvels it is not surprising that many cereologists have been driven to conclude that some form of intelligence is at work, expressing itself through ciphers in cornfields." Readers should take a long deep breath before carefully listing as many less exotic explanations for this alleged event as they can think of in the five minutes it takes to cut one's toe nails. Significantly, it is not explained why the alleged appearance of an additional ring around a single formation should be sufficient proof that a meteorological causation cannot hold true for the remaining [estimated] 1,499 known circle events on record (e.g. the extra ring could have been a hoax). Nor is it explained what kind of "intelligence" Michell is referring to when he attributes this apparently widespread belief to all the "cereologists" he collaborates with (undoubtedly none of these circles researchers are meteorologists and none of them have been canvassed by the Centre for their opinions on the matter).

I could go on and on about the inherent bias displayed by this magazine, but then since we too are biased (and in many more wicked ways !) I hope I've made our viewpoint clear. Don't get me wrong about "The Cereologist" as there are both good points and bad points in this first issue. Some of the articles make important reading (e.g. Bob Rickard's perceptive comments about defining what is meant by an "intelligence") and undoubtedly this magazine will become a useful reference tool to students of the phenomenon. Many of the articles are superbly illustrated with aerial photographs and drawings of Streiber-style entities, Mowing Devils ("No Job Too Inexplicable") and a superb Saxton-style map of the Alton Barnes location (pity about the wrong orientation). We were also pleased to see the negative comments about Hall and Macara's Fungus Theory (sentiments we support entirely) and we agree that David Fisher's analysis of the crop circle phenomenon (in "The British & Irish Skeptic", March/April 1990) was unbalanced when he suggested that ALL crop circles were hoaxes (an utter cad !).

New magazines always begin on a tidal wave of hope and ambition, and "The Cereologist" is clearly no exception. With such a beautiful and perplexing anomaly as the crop circles to study we hope that both "The Cereologist" and "The Crop Watcher" will contribute something important to our understanding of the fascinating subject which currently divides us.

Paul Fuller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Preparation for meditation to open a stargate, July 2004. Copyright: Francesco Grassi.

A gathering place for "croppies", July 2004. Copyright: Francesco Grassi.

Doug Bower at the Nafferton Hall, Marlborough, July 28th 1993

(by Paul Fuller)

[excerpt from *The Crop Watcher*, Issue number 18, July/August 1993]

Driving up to Marlborough one sunny evening in July I wondered whether I was about to attend the crop watcher's morgue or one giant punch-up. How would the cerealogists react to having Doug Bower there in person ? Would they believe his tale ? Or would they physically assault him for his treachery ? And what would they do to some- one like me who had dared to publicly accept Doug's claim that he and Dave Chorley began making crop circles in the mid 1970s ?

Nafferton Hall was difficult to find, located up a dark unlit alleyway opposite Marlborough Town Hall. The hall itself was raised above surrounding back gardens up some steep iron steps. I paid my fiver and went in. Surprise number one was the size of the place. The doors had just opened and already all the seats were taken ! I guess there were less than a hundred people in the room and I struggled to reach friends and acquaintances as people pushed and shoved their way round what little space remained. Many tried to inspect the two large display boards that Ken Brown and Doug Bower had obviously spent a good deal of time preparing. So great was the crush that I was barely able to examine this photographic evidence, let alone Doug and Daves' circle making equipment positioned on the far side of the room. Nevertheless what I saw on that board convinced me beyond a shadow of a doubt that this was no "fraudulent sham" as George Wingfield would have it but a well-organised presentation of Doug and Daves' case. With some misgivings I soon realised that I was possibly the most senior "cerealogist" there. Pat Delgado and Colin Andrews were conspicuous by their absence, as was Michael Green, Jim Schnabel (back at CIA headquarters in the States) and Terence Meaden (sunning himself at his luxurious French Villa - paid for by MI5 of course). Also missing was George Wingfield, who had somewhat inconveniently stepped on a nail a few days before (typically, George had forgotten to send his apologies). Oh dear ! Looks like I'll have to defend the "science" of "cereology" all on my own !!

Ken Brown welcomed everyone to the meeting, which began promptly at 7.30. Brown began by warning everyone present that this was an opportunity for Doug Bower and himself to present their evidence, not for anyone to interrupt their presentation, to promote their personal theories or to cause a disturbance, which would not be tolerated. Almost immediately, as if the crop spirits themselves had been aroused, his introduction was interrupted by someone's tape recording loudly misbehaving. Such was Ken Brown's good nature that this was quickly brushed aside as "NOT the Grasshopper Warbler".

Brown explained that he was Doug Bower's "amanuensis" - his "taker of notes" - and that he had realised that all circles were hoaxes after discovering underlying tracks at the 1991 double-ringed flower at Cheesefoot Head. He explained that in January 1992 he had subsequently approached Doug Bower in order to clarify certain aspects of his claim. Over the next 18 months Brown repeatedly visited Doug Bower's picture-framing shop in Southampton, sometimes spending whole days there. What Ken Brown discovered in these meetings only convinced him further of the truthfulness of their claim.

Ken Brown then made an astonishing statement about the absence of Dave Chorley, stating that Chorley had deliberately not been asked to attend the meeting. Doug Bower explained "During the past 22 months it has become obvious that David's memory is not as clear and accurate as it could be - and there are those who would use this to their own advantage. This type of meeting relies upon answers being as accurate as possible, so we thought it best not to give anyone an opportunity to confuse the issue. That's the real reason why Dave is not here tonight.... ". Ken Brown clarified this statement by explaining that Doug Bower was the mastermind who was responsible for "99 per cent" of the crop circle hoaxing. By contrast according to Brown Dave Chorley would be the first to admit that he was "just another pair of hands who happened to be there".

Brown then asked what he believed to be the most important question - has there ever been a genuine crop circle or did these two men invent the phenomenon in the mid 1970s ? Brown stated that if all crop circles are hoaxes then ALL attendant phenomena can also be dismissed. He then introduced the display of Doug Bower's own photographs taken during every year since 1980. According to Brown this was primary evidence which proved their case. These photographs were debated repeatedly as the evening progressed.

Throughout his presentation Brown was scathing about the crop circle researchers, dismissing "Pope" Andrews and Delgado as "those self-seeking, publicity-pushing, self-styled 'expert' circle researchers" who had quickly "corralled" themselves into a "clique of powerful high priests and a flock of willing sheep" who were "highly enthralled by a hyped-up load of nonsense". Brown commented "And we all know what happens when power and position and pennies are up for grabs - we get a brand new hierarchical religion". According to Brown these so-called researchers "jealously guarded" their "temples" - the crop circle databases which were "locked away" from the "unbelievers" - and they published their own "parish magazines", holding their own "prayer meetings" and "swooning" at the "shrine" of a mere crop formation, where "miracles" were said to have happened. "God help us ! We're back in the middle ages walking bare footed to Walsingham".

Next Brown alleged that in a meeting with Colin Andrews, some time after the Doug and Dave story had broken, Andrews had claimed that "There are probably only a dozen circles out of all the circles we have ever had - that I can put hand on heart and say I think they are absolutely genuine". Andrews allegedly confirmed this on 18th January 1993 in a telephone call to Brown. Later, Lucy Pringle and Pat Delgado are alleged to have stated that Ken Brown was playing with people's "faiths" and "irrationalities" and that by investigating the Doug and Dave claim there was a "danger" that Brown was destroying the beliefs of "90 per cent of the crop circle believers". Brown alleged that Delgado and Pringle were keen to hush up the

truth about the Doug and Dave claim and simply “worry about people’s faiths and dreams” in case they ended up “like the Bishop of Durham”. It was this desire which had led to “screaming abuse” from the “circle establishment”, who had accused Doug and Dave of telling “a pack of lies” and of being “government secret agents”. According to Brown, “The circle establishment has always fabricated its own form of The Truth. They resort to diatribe and innuendo, and - worst of all - finally to the last resort of paranoia, where everybody and everything can be explained away as The Enemy”.

Ken Brown took the opportunity to explain why Doug and Dave had not - as had been their original plan - written a book about their circle-making. Apparently they had been advised by a solicitor that a written confession that they had made a specific circle at a specific site in a stated year would be interpreted by the courts as a clear admission of trespass and whilst the final proof that financial loss had been incurred would be the responsibility of an individual landowner it was quite possible that a judge would seek to make an example of Doug and Dave, perhaps with a fine of £ 10,000 or a 3 month prison sentence. Despite this in early 1993 Ken Brown had given Jurgen Kronig a full written account of Doug and Daves’ story which, for reasons the German publishers never made clear, was dropped from the second edition of Kronig’s book in May. These two meetings were thus the only opportunity the crop circle community would have to question Doug Bower personally.

Apology

Doug Bower then read out a prepared statement which read “I’d like to apologise to farmers and landowners, and to thank them for the tolerant and good-humoured way in which they’ve viewed the escapades of two middle aged pranksters who became obsessed with an idea - it was nothing more than a practical joke from the start”.

During his opening remarks Doug Bower bitterly attacked the “so-called” researchers and experts for their commercialisation of the phenomenon. He claimed that he and Dave Chorley stopped making circles because they were “so disgusted” with the huge amounts of money that these “researchers” had made from their promotion of his circles. “I’ve had the biggest insight into the human being ever in the last few years ... We’ve been insulted, my wife’s been insulted. What a defence these people have put up ! Government agents ! We’ve not called anyone any names at all ! All we’ve said is the truth - in the [news]paper. But we’ve been insulted left, right and centre, we’re [accused of being] frauds, we’re [accused of being] liars, government agents ! They’re trying to hold on to something that’s been gathered in. I tell you right now that its finished ! Because had the crop circle hoaxers in Wiltshire stopped making their circles when we put our story over in 1991 they’d be no more circles for them to research.... It had to finish sometime, it can’t go on forever. I don’t see why we should do it for 14 years and not publicise it that we were the culprits. Lots of people have had a good laugh but it was us - lots of people don’t believe us ...”.

Biographies

Thanks to Ken Brown’s research we now know more about Doug and Dave’s lifestories. Doug Bower was born on 25th June 1924 in Southampton and became an apprentice wood machinist. He volunteered for flying duties in the Royal Air Force when he was 18, passed out as a wireless operator, air gunner and volunteer reserve. During the war he became a cabin steward on RMS Acquitainier and crossed the Atlantic 56 times helping to ferry GI brides and Canadian Soldiers to and from the European war. Then he returned to live in Southampton as a wood machinist and married Ilene. On Trafalgar Day 1958 Doug and Ilene set sail from Tilbury Docks on a £ 10 per person emigration package to Australia where Doug became a woodcutter and picture-framer. Doug built his own house and owned a small plot of land. However, both Doug and Ilene became acutely home sick and returned to Southampton in the autumn of 1966.

Within 18 months they'd taken over a small shop in Bassett where they sold pictures and picture frames. In his spare time Doug became an expert wild-life sound recordist, travelling throughout the British Isles capturing bird songs on tape ("so he knew all about the grasshopper warbler"). In his time he has won many awards for his sound recordings and has even had some of his bird songs published by the National Sound Archives and the Hamlyn Publishing Group.

Dave Chorley was born on 26th August 1929, left school at 14 and became a storeboy on Southampton Docks. His apprenticeship to become an electrical engineer was interrupted by National Service but he also served two years as a wireless operator with the RAF. Afterwards he returned to the Docks and helped modernize the old Queen Elizabeth and Queen Mary ships. Dave Chorley also sailed across the Atlantic and during this time developed his love of painting. At 26 he became the youngest trades unionist shop steward in Southampton Docks. He married Terry in 1960 and raised a family of three sons and a daughter. After 30 years working in the docks Dave Chorley left and made his living "scratching around", working on colourings and steel engravings, even being employed by Rose Kennedy, mother of President John Kennedy, to colour antique prints of the early American west. Later Dave divorced but still lives in Southampton and works as a freelance artist.

The Evidence

Taking each year in turn Ken Brown prompted Doug Bower to recount his story. There were many new revelations which rung true to all but the most avid crop circle believers. One particular story concerned the creation of a circle at Micheldever next to the main Southampton-Waterloo railway line. The following day Doug and Dave travelled from Winchester to Micheldever on a train to view their creation. Unfortunately the train was travelling so fast they hardly caught a glimpse of their creation, much to the amusement of a child and her mother travelling in the same compartment, so the

following day they returned to the site and made the circle that much bigger ! This incident became known as “Von Ryan’s Express” after the film. This event - along with many others - was later featured in a Christmas card drawn by Dave Chorley, which was on display in the corner along with other Christmas cards featuring other circle-making expeditions.

Bower described how he and Chorley began their crop circle career in 1975, not the 1981 previously referred to in the TODAY newspaper. Here are some of these revelations:-

(1) Doug and Dave used to take food and coffee with them, later even taking a frying pan to cook a meal after making their circles !

(2) Doug was the catalyst for the circle-making, drawing up the plans before-hand, making all the circle making equipment, even providing Dave Chorley with a pair of Wellington Boots and a waterproof coat!

(3) Doug initiated every circle by (almost always) constructing the centre first and then working outwards.

(4) Doug first met Dave a year or so after opening his picture-framing shop. They used to visit public houses for ten years before they began making crop circles.

(5) It was Doug who knew about the Tully circles and who suggested that they make a circle to make people think that a “flying saucer” had landed.

(6) They began making circles by using the iron security bar from his shop. They used the bar by kneeling on the corn and pushing the bar half way up the corn. This first method hurt their knees so they changed over to the stick and rag method shown on TV.

(7) The “first circles” they created must have predated 1976 by several years because Doug Bower remembers Dave Chorley refusing to go with him on one of their “regular” circle making

journeys because Dave Chorley's son wanted him to watch him playing in a school match that year.

(8) There had to be a layby located close by the circles in the early years. Later, as more and more researchers were visiting circle prone areas, Doug and Dave would leave Doug's car in the lane adjacent to the caravan park by the Percy Hobbs pub and then walk two miles into Cheesefoot Head bottom to avoid being detected.

(9) After making the centre the circle was made by a series of concentric rings pushed down.

(10) the Alfriston circles of 1984 appeared close to Dennis Healey's garden purely by accident, neither Doug or Dave knew about Dennis Healey or the suspicious proximity of "Cradle Hill".

(11) Dave Chorley's ex-wife Terry knew nothing about the circle-making until she saw the "Today" exclusive.

(12) D&D made no more radial swirls after the problems they had making the 1987 Chilcomb "cheese wedge"

(13) Doug used to telephone Colin Andrews the morning after he had made a circle to tell him about it !

(14) Doug and Dave's circle at Childrey, Wantage (1985?) circle displayed a "runway" and "hole" to make it look as though the aliens had taken soil samples. The soil and corn removed from this hole was dumped on the A33 Chandlers Ford by-pass on the way home.

(15) D&D admitted making the "WEARENOTALONE" message in the Cheesefoot Head punchbowl in 1987.

(16) to avoid detection D&D used to park their car in the dead-end road by the caravan site at the Percy Hobbs pub and then walk up into the punchbowl via the A31 back route.

(17) As Dave had to watch his son playing football Doug did the 1987 South Wonston oilseed rape circle on his own.

(18) The only time Doug and Dave were “caught” was at the Long Man of Wilmington in 1987, when Doug and Dave were preparing to make a circle and were interrupted by a stranger who thought they were about to put up a tent. This was on the same night as Jenny Randles’ remote sensing experiment advertised in “The Unknown”.

(19) The first non Doug and Dave circle was beneath the White Horse at Westbury in August 1987 - but the circles were too far from the hillside to be Doug and Daves’ efforts. This was the year that they made “COPYCATS” . Ken Brown claimed that he had a list of “over a dozen” circles from 1987 which were not D&D’s circles and that - somewhat paradoxically - “maybe they were genuine”.

(20) The triangular triplets at Corhampton and the Cheesefoot Head punchbowl in 1988 were based on the triplet in Billy Meier’s book “Light Years” which were publicised in an article in the September 13th 1987 “News of the World” colour magazine. Of course the earlier triplets were all three-in-a-line rather than in formation. D&D used a method similar to that used by the “Dambusters” by using string attached to rods to get these three circles precisely positioned in an equilateral triangle. Because the rods bent as they pulled the string the Corhampton circles were less well positioned than the punchbowl circles.

(21) Christmas 1988 D&D fell out so Doug had to make all the earlier 1989 circles, including a failed circle in rape at Chilcomb and the infamous contra-rotating circle that appeared out of sight of the cameras during Operation Whitecrow.

(22) There is some confusion about the “swastika” on the front cover of “The Crop Circle Enigma”. Ken Brown believes that D&D made this formation and the earlier “swastika”, although Doug Bower can only recall having made the second formation. This was laid down by

laying the outer rim first then using the cross-piece to mark out the angles. This was another formation where mistakes were made when laying down the corn. It is for this reason that Ken Brown believes D&D returned to have a second attempt.

(23) On one occasion, in 1990, D&D were making a circle in the punchbowl when they were fired upon by farmers shooting at rabbits from a Landrover.

(24) The pictograms were based on a modern art painting. It was Ilene who proposed making the flower patterns.

(25) After being struck by the toilet bomb Doug and Dave carried on making their circle to avoid leaving a half-completed circle. Ilene had to shampoo Doug's hair to remove the muck.

(26) It was one of Dave Chorley's sons who accidentally let the Doug and Dave story out of the bag to a reporter from the Daily Mirror. D&D owned up on 3rd September 1991 to the Daily Mirror, who were not interested in the story, and then to the TODAY newspaper.

(27) Ilene discovered Doug Bower's circle-making activities in 1984. Thereafter Doug was able to go out making circles on several nights of the week.

Photographs

One of the strongest pieces of evidence revealed were the photographs Doug Bower had taken in every year since 1980. There was a previously unknown photograph of a single circle in the Cheesefoot Head punchbowl in 1980 along with Doug Bower's own photograph of the 1982 single at Litchfield. Also there were (apparently) photos of Doug and Dave half way through making the infamous Sevenoaks circles - the ones which led to TODAY's exclusive expose of their circle-making claims. Ken Brown has obtained copies of the TODAY photographs which (apparently) show Doug and Dave half way through this hoax. In addition there were

two photographs of the 1982 Cley Hill circles which had subsequently been identified by Meaden plus a previously unpublished photograph of a single in the punchbowl in 1987. [Ken Brown has subsequently circulated photocopies of some of these photographs].

Westbury 1980

Another highlight of the evening was Doug Bower's three photographs of the 1980 Westbury circles. The first of these three circles probably appeared in May but had been harvested by the time of the "Wiltshire Times" article of August 15th. Terence Meaden has confirmed that this "first" photograph was in precisely the right place according to his records. The second and third circles were discovered by the farmer, John Scull, on August 13th, and may have appeared on July 21st and 31st. For these reasons neither Ian Mrzyglod or Terence Meaden have ever possessed or even seen photographs of this very "first" of the "first" circles. In question time I pointed out the importance of this evidence (which didn't go down too well with some of Doug Bower's accusers). How could Doug Bower have obtained these photographs unless he was the person who created them? How could he have known that he would have had to drive 60 miles up from Southampton after these circles appeared unless he made them ? No one presented an argument to falsify this evidence. On display were a cross-piece and torch, for positioning the outer satellites of the quintuplets, which Doug demonstrated. In addition Doug demonstrated the use of his extendible pole, which had been used to ensure that annular rings were always equidistant from the outer edge of the circle. This was four feet long - which apparently coincided with the width of standing crop in many of the ringed formations.

One of the highlights of the evening was Ken Brown's impromptu request for a brief statement by Matthew Lawrence, the discoverer of many of the original Cheesefoot Head circles sensationalised in "Crop Circles, Conclusive Evidence" and "Crop Circles, The Latest

Evidence". Lawrence made the following statement about the state of the circles he discovered:- "I used to get up to [Cheesefoot Head] at about half past four on numerous occasions, just as the sun came out, and I was quite surprised when I went in because I knew that I was one of the first people in there and they weren't as immaculate as they'd said in 'Circular Evidence'. There was quite a lot of damage on the crop, there was tracks I could see in places, sometimes mud on the actual crop around the edges, which would suggest that someone had been in before .. so [perhaps] I wasn't the first one there ...".

This statement demands a public explanation from Colin Andrews and Pat Delgado, who have repeatedly stated that the circles they discovered at Cheesefoot Head were pristine, undamaged and showed no sign of human entry. If it can be shown that Andrews and Delgado misrepresented the condition of the circles in the Cheesefoot Head punchbowl this would be evidence of a cold calculated fraud which should be dealt with by the courts [see article on page 30].

Another important piece of evidence discussed was the "red dot" maps compiled by Ken Brown. These were Ordnance Survey 1:50 000 maps with the locations of all the circles Doug and Dave can recall having made. According to Brown the maps contain over 40 locations which have never been published anywhere. Brown alleged that Don Tuersley and Richard Andrews had both approached him and confirmed the existence of previously unpublished circles on these maps.

Unfortunately 3 hours was not enough time to present all the evidence. The audience may have missed the large poster showing the pavement at Westminster Abbey. The pattern on this pavement looked very similar to the quintuplet patterns that Doug Bower claims to have invented in 1981. For some reason this poster was not discussed during the presentation.

Question Time

By 10 o' clock the audience had grown increasingly impatient and Ken Brown, realising he had over-run his own schedule, wisely invited questions. By any standard the question and answer period was heated, although most members of the audience at least refrained from making open insults. Polly Carson launched a fierce attack on Doug Bower, claiming that she could not accept his story because of the lack of photographs showing him half way through making a circle. Later she accused Bower of being a crop "vandal" who had maliciously tricked two genuine, contentious researchers, Colin Andrews and Pat Delgado. She vowed that the farmers would push for a prosecution. A number of people expressed their total disbelief in Doug Bower's story. Chad Deetken from Vancouver challenged Bower to demonstrate how to make crop circles at night with complex layering effects. Doug Bower stated that he would be prepared to start making circles at midnight and carry on until 6.30 or 7 in the morning whilst Deetken watched. This acceptance of Deetken's challenge drew applause from the audience. In response to a question from Michael Hesseman Ken Brown admitted that Doug Bower and Dave Chorley had made the 1992 formation at East Meon. A woman at the back described a new eye witness account. Montague Keen stated that he accepted "most if not all" of Doug Bower's story but he expressed his puzzlement at to why we were being asked to accept Doug Bower's story without any photographic proof yet at the same time we were being asked to dismiss the testimony of farmers dating back decades when they too had not been able to furnish photographic proof that they had seen crop circles decades ago. Keen observed that whilst Doug Bower's story may account for much of the phenomenon it didn't explain the reported luminosities and other strange effects reported in the literature. In response to another question from Michael Hesseman Brown admitted that he was intrigued by UFO films such as the Concorde flight. Asked whether Doug and Dave had made any more circles after the 1992 East Meon formation Ken Brown responded "no comment, and you can take the correct inference if you wish".

Error

Ken Brown made his only real error of the night when he claimed that there were no photographs of sharply defined pre 1975 circles despite more than a decade of research. This, in his opinion, only proved that “corn circles were Doug Bower’s original idea”. He repeated this heresy by claiming that the Tully reeds circle was a “dish-shaped” depression in reeds that was not like the circles that Doug and Dave had “invented” in 1976. He then dismissed my historical crop circle photographs by claiming that they showed “slanting edges” ! Contradictory Brown claimed that he didn’t really care what had caused the Tully circles and that perhaps they had been “blown down by some kind of force” ! In the question and answer session I too challenged Ken Brown’s claim by presenting my photographs of the Rossburn, Bordertown and Wokurna circles [which all feature in the 2nd edition of “Crop Circles, A Mystery Solved”]. At last ! Here was my opportunity for a well-planned piece of cerealogical espionage. I loudly passed around my photos to disprove Ken Brown’s treason and this only enraged the audience all the more. Snigger, snigger !

THE BARGE INN
USHERS
FINE ALES
Real Ales
Good Home
Cook
FOOD
Pub Games

Entrance of The Barge Inn*, July 2004. Copyright: Francesco Grassi.*

Details on the ceiling of The Barge Inn*, July 2003. Copyright: Andrea Feliziani.*

Wheat fields to be painted*. Copyright: Francesco Grassi.*

Doug Bower at Neal's Meeting Yard, Covent Garden, London, August 3rd 1993

(by Paul Fuller)

[excerpt from *The Crop Watcher*, Issue number 19, September/October 1993]

Following Doug Bower's lecture at Marlborough the previous Wednesday (described in CW18) this second meeting was held in

the amphitheatre at Neal's Meeting Yard in Covent Garden. This summary of what took place is based on a tape recording of the meeting supplied by one of The Crop Watcher's many spies and agents. Sadly this second lecture was poorly attended, with only about 35 people in attendance compared with nearly 100 at the Marlborough meeting. In contrast to the earlier meeting the Covent Garden lecture was a more abusive and disruptive affair, largely due to the antics of Stanley Morcom, one of the original members of the Centre for Crop Circle Studies. Morcom bought himself and his subject no credit at all by engaging in repeated outbursts and slanderous attacks. On two occasions Morcom openly accused Bower and Brown of being "liars", an accusation which to my knowledge he has not withdrawn.

Style

The style and format of the lecture closely followed the Marlborough lecture, as Ken Brown had wisely planned the meeting by preparing written notes of what he was going to say. He again repeated his main theme "Tonight is intended to highlight the fact that corn circles were Doug Bower's original idea".

Apology

Doug Bower then repeated the statement he read out at the Marlborough meeting. It read "I would like for us to go down on the record for us to apologise to farmers and landowners, and thank them all for the tolerant and good-humoured way - I hope that's correct - in which they've viewed the escapades of two middle aged pranksters who became obsessed with an idea - it was nothing more than a practical joke from the start".

Ken Brown continued:-

"I don't ever want to criticise true faith, however much I might disagree with it. I don't wish to make a fool of anyone's sincere belief but I AM justified in criticising Colin Andrews, Pat Delgado and

Terence Meaden and latterly George Wingfield, of course. But particularly all those who were around in the early years of circle investigations who made no effort to be entirely objective. It seems to me those so-called experts were everything but objective in their research of the circles. To my mind they all deserve the severest criticism. There was sufficient evidence around for this subject to have been wrapped up, packed away and forgotten completely in fact even before - well before - Colin Andrews came on the scene in the mid 80s."

"Anyhow, you can easily see, when Doug and Dave came clean in the TODAY newspaper in '91 it was far far too late. Doug and Dave had been swamped, overtaken. They'd become irrelevant to the religion of corn circles. And because they themselves hadn't seen the faith growing they were amazed their story wasn't taken seriously. Just try to imagine yourself in their shoes. You tell the truth, you KNOW its the truth, but the Pope and the Priest and the Parishioners will not give up their faith. But then why should they ? Faith is not about reason. Faith is not about being rational. Faith is [not] common sense. And much worse, Faith does not like to be questioned. So when I first met Doug Bower and Dave Chorley they still had no understanding of the diatribe being hurled at them. But after I'd earlier provided a few circle magazines and comments from a couple of lectures I'd been to their eyes began to open. I could see that the TODAY newspaper story gave only a brief and slightly distorted picture of a period which must have lasted over 20 years since Doug and Dave first met. Some of my more reasonable circle friends were raising questions about how much of the real truth these two guys from Southampton really were telling. I just happened to be there at the right time and the right place."

Ken Brown then repeated the claim that he made at the Marlborough Meeting, that on the 28th October 1991 he presented Colin Andrews and Pat Delgado with evidence which supported Doug and Daves' claim. According to Brown Colin Andrews stated that "There are probably only about a dozen circles out of all the circles we have

ever had that I can put my hand on heart and say they are absolutely genuine". According to Brown Colin Andrews repeated this claim in a telephone conversation with Ken Brown on January 18th 1993. Then it was Doug Bower's turn. "Well, as Ken has already said to you, the thing that's upset us most of all is the opposition that we've had from these people. The general public I think - the majority of them anyway - accepted our story right from the start when it arrived in the paper in September 1991, but what was going on behind the scenes up until that time we had no idea until Ken came on the scene and he told us more or less about it. We only knew about four people which is the important people - these are the people that are still in opposition to us. I mean we've had nothing but insults over the telephone and in writing. My wife has been insulted. Its been nothing but insults ever since it all started in September '91. This is the thing that upsets us most of all. As Ken said just now we were hoping that the whole thing would have come to an end in September '91 they would have probably come up to us and shook our hands and say 'Thanks very much for what you've done, we've made a lot of money out of you and my God this is what's really behind it all' - its the pounds, shillings and pence - this is all that really matters. There was a statement only three days ago in the Southern Evening Echo - that Pat Delgado and Colin Andrews have now reached the 500,000 figure for his books - and translated into four languages. So I mean I can see really why the resistance and opposition has been put up towards us, they wanted to keep this going. And anyone with an income such as that are not going to accept our story."

Ken Brown then presented Doug Bower's own photographs of crop circles from the early years - photographs of crop circles which Brown claimed had never been reproduced in the crop circle literature. He claimed that Doug Bower had numerous photographs of such circles and that this proved that Doug must have made these circles. He accepted the point that was made by Stanley Morcom and another member of the audience that had there been only one or two such photographs this would have proven nothing. His point

was that there were numerous such photographs dating back to 1980-82 and that this was pushing coincidence beyond chance level.

The Historical Photographic Evidence

Ken Brown continued: “Some people have said that Doug and Dave must have copied an original idea - [They say] where did they get the idea from? They must have copied the same thing somewhere in their mind or seen somewhere - [This is] Not true. That’s [a photograph of] Tully. Tully was some circles made in reed beds or circular impressions made in reed beds. The photographs - I’ve blown one up there - is of a dished side - a curved side, the reeds are bent in other words - curving in a little bit like the side of a cup. So that’s what Tully looked like. Paul Fuller keeps coming up to me - and he came to Marlborough to bring out all his photographs - Paul lent me all his evidential photographs for pre Doug and Dave circles. All Paul Fuller’s photographs are blown down - blown down - pretty flat - not even with a slant on like that - they are even more wind blown than this [Tully]. Paul Fuller says there are plenty of circles pre the mid 1970s. I don’t deny that, but boy oh boy they’re not circles as we know them. Circles as we know them - our crop circles - since the mid 1970s are straight rigid sided affairs. They are not wind blown with slanting sides. They are not dished like Tully was dished.”

Readers are invited to comment on this claim. The 2nd edition of “Crop Circles A Mystery Solved” (Robert Hale Ltd) carries three photographs of circles which we believe disprove Ken Brown’s claim that Doug and Dave “invented” straight-edged crop circles in the mid 1970s. These three photographs were taken in Canada (1977) and Australia (1973). Doug and Dave have repeatedly confirmed that they only created crop circles in Britain. There is also a photograph of what looks very much like a sharply-defined crop circle at Aix- en-Provence, South-East France, on 20th May 1977, in The Probe Report, Vol 3, No 4, April 1983.

Tracks

Doug Bower was then invited to describe how he made crop circles. He and Dave always wore Wellington boots with deep treads. Apparently Dave Chorley used to be very concerned about the damage their boots left in the standing crop but this would normally be covered up by the circle they were creating. Ken Brown stated that he thought it was “remarkable” that the crop circle researchers had never noticed the tracks left by these boots. Lucy Pringle remarked that she possessed photographs showing tread marks underneath circles.

In response to another question Ken Brown stated his belief that Doug and Dave had never made any “grapeshot” circles - the smallest circles they had ever made were only 8 feet across because the width of the security bar from Doug’s shop was only four feet long. In response to another question Brown dismissed the claim that it was impossible to see where the tramlines were in the dark without the use of a torch. He went on to state that it was quite possible to walk through standing crop without leaving a trail. Stanley Morcom confirmed this.

Doug Bower then explained that the centre of every circle he had ever made displayed a clockwise circle. The only exception was when making the outer rim. Ken Brown described how Doug Bower had created the “illusion” of a spiral pattern by laying down a sequence of straight lays. This method had been convincingly demonstrated to him by Doug in the field. In response to a question from the audience Ken Brown stressed that he had only examined the Bower and Chorley method of laying circles and that other groups of hoaxers undoubtedly used different methods which produced different characteristics.

Doug Bower then explained that he had discovered that standing crop was often knotted into small patches where the wind had blown the crop to point against the direction he was pushing his 4 foot rod (the security bar from his picture framing shop). When this happened it was much harder work to push the rod through the crop as it had to

be pushed at an angle. It was this angle which contributed towards the eccentricity of the overall crop circle. Sometimes this effect was so marked that Doug would have to use a piece of string to mark out the rim of the circle so that he and Dave Chorley could push the crop down into a more neat circle. This was exacerbated if he and Dave Chorley began making a circle from opposite positions within the initial eight foot circle.

Ken Brown then prompted Doug Bower to repeat the story of “Von Ryan’s Express” first told at the Marlborough Meeting. It seems that this story relates to the 1978 Headbourne Worthy circle - shown on page 16 of “Circular Evidence”. As Doug Bower states this formation would certainly have been visible from the main Winchester to Waterloo railway line. Again Dave Chorley’s Christmas Card that recorded this event was presented (Dave’s inscription read “Must be something big going on in Micheldever tonight” - a reference to a remark by the ticket inspector at Winchester railway station).

Ken Brown then stated that according to his calculations Doug and Dave made 42 of the circles that featured in the 61 colour photographs in “Circular Evidence”, 27 of circles featuring in the 52 colour photographs in “The Latest Evidence” and 34 of the circles featured in the 68 colour photographs in “The Crop Circle Enigma”. [This makes a total of 103 out of 181 (57 per cent). Of course some of these photographs are of the same formations so this percentage is an inflated estimate of the actual percentage, PF].

In response to a question from Alice Keen-Soper Ken Brown stated that in his opinion any circle which postdated Doug and Daves’ first circles was by definition a man-made hoax. In response to a second question from Lucy Pringle Ken Brown admitted that there was no photographic proof that Doug and Dave made the circles but that he and Doug were “baring our souls” so that people could assimilate all the evidence that was available. A third member of the audience [Chad Deetken I think, PF] pressed Brown as to why he believed Doug and Daves’ story simply because they had told him they had

made the circles. Brown retorted that there was more than just their word, he had interviewed both men at length, had discovered their own photographs of circles they claim to have made in Doug Bower's scrap-book and had seen the result of a demonstration which convinced him of the truthfulness of their claim. Doug Bower responded to a further question about why he and Dave Chorley made so many circles over such a prolonged period in time. Doug Bower admitted that it had become an "obsession" that was fuelled by the media publicity.

Ken Brown then prompted Doug to recount the early years of his circle-making. Many of the points raised at this point in the meeting had been raised at the Marlborough meeting so these points will not be discussed here. The only new revelation concerned Doug's own photograph of a previously unpublicised quintuplet event at Cley Hill in 1983. In response to another challenge by Chad Deetken Ken Brown pointed to the TODAY newspaper's own photographs of Doug and Dave half way through making their demonstration circle at Sevenoaks - the formation which featured in TODAY's exclusive story which had been promoted as genuine in such glowing terms by Pat Delgado.

Ilene Bower was invited by Ken Brown to describe how it was the Alfriston formation of 1984 which alerted her to the fact that Doug Bower was involved in something secretive. She was alerted by the high mileage on the car, which Ilene noticed because she did the books for her husband's picture-framing business.

Doug Bower went on to describe how he alone created the "first" circle in oilseed rape - at South Wonston in 1987. He rejected Chad Deetken's claim that he couldn't have made this circle without damaging the brittle thick stem. Ken Brown asserted that he had a list of 12 circles in 1987 which had not been made by Doug and Dave but which must have been made by copycat hoaxers. Later the audience were amused to learn that following Colin Andrews'

request for information about new circles Doug and Dave would make a new formation and then telephone him with the news !

Flashpoint 1

The first flashpoint of the evening concerned a disagreement between Ken Brown and Stanley Morcom over the so-called Swastika formation. Ken Brown stated that the truth behind the appearance of these Swastikas was difficult to unravel as Doug and Ilene Bower were both convinced that Doug had made only the second formation, the one positioned north of the A303 trunk road. Ken Brown found this difficult to accept as it would imply that another group of hoaxers made the original circle and that Doug Bower then made the second formation less than a mile or so away by sheer coincidence. At this point Stanley Morcom interrupted and claimed that on a previous occasion Ken Brown had claimed to him that Doug and Dave did not make either of the two Swastikas. During the ensuing argument Morcom accused Brown of changing his story and “lying” to him. Brown dealt with Morcom’s attack in his normal good-humoured way by admitting that he was actually an “M.I. 5 agent”. Whilst this amused the audience it did nothing to deter Morcom’s mounting disbelief in Doug and Daves’ story.

Morcom renewed his attack by referring to Doug Bower’s earlier claim that he made most of his circles using the four foot long security bar from his picture-framing shop. Morcom stated that the 1989 Corhampton triplet displayed “seven or eight” concentric rings with an average width of 2 foot 2 inches. Morcom wanted to know how Doug Bower could make concentric rings 2 foot 2 inches across with a rod of 4 foot length. Ken Brown suggested that the rod could have overlapped adjacent lays. Morcom himself suggested that this effect could be produced if the rod was pushed through the crop at an angle. Morcom then returned to the controversy over the two Swastika formations and Brown concluded by saying that he thought that even though Doug Bower could not recall having made both

Swastikas the facts suggested to him that Doug Bower must have been responsible for both formations.

Flashpoint 2

Stanley Morcom again interrupted Ken Brown as he was discussing Doug Bower's construction of the first pictogram at Chilcomb in 1987. Morcom challenged Doug Bower as to how he constructed the "coffins". Doug Bower replied that he and Dave "jumped". Morcom took this to mean that Doug Bower jumped ten feet in one go - something Doug Bower had obviously not meant to imply. Ken Brown correctly pointed out that the TVS newscast of this formation showed that there was a trail linking the "coffins" to the rest of the formation but Morcom demanded that Doug Bower answer his question without Ken Brown's assistance. In the ensuing argument Morcom twice admitted that he believed that "all" crop circles were hoaxes. His questioning of Doug Bower to account for how he managed to jump "10 feet" from the spur to the "coffins" then became unnecessarily provocative and confrontational. Morcom concluded the argument by stating that "I've got a feeling that I've been told a lot of lies".

Flashpoint 3

Subsequently, when describing the Hazeley Farm Fields pictogram both Morcom and Pringle challenged Ken Brown and criticised him for telling Doug's story despite the fact that he had not even been present when the circle making had allegedly been taking place. Brown defended himself by stating that he had examined the evidence at length with Doug and Dave and had managed to coax out of Doug facts and events which Doug himself had not understood. He justified his method of presenting the evidence by stating that he knew "more about Doug Bower's circle making than Doug Bower himself". Lucy Pringle then asserted that despite the fact that many circles may or may not be hoaxes she had still

discovered unusual effects inside crop circles that she could not account for.

Flashpoint 4

Doug Bower again stated his unhappiness with the way he had been treated by the “so-called experts”. For years crop circles had been promoted as genuine then suddenly - once his story broke - he and Dave Chorley were being dismissed as “frauds” simply so that a few people could carry on making money out of his circles. Stanley Morcom countered by pointing out that he had spent a fortune investigating circles but Doug Bower never mentioned the sacrifice he and others had made to research the phenomenon. This only seemed to incense Doug Bower further as he forcibly pointed out to Morcom that he and Dave Chorley had never asked Morcom to spend money investigating their circles, it had been Morcom’s decision to spend the money. Morcom challenged Bower as to whether his circle-making was intended to “fool” himself. “Yes - all of you. We fooled you all!” was Doug Bower’s triumphant response. He continued, “My next hoax is going to fool the world even more than this one”. This ominous statement was met with delighted applause from the audience.

Stanley Morcom attempted his fifth attack of the evening when Doug Bower described how he and Dave Chorley left “meteorites” in some of the Stonehenge formations of 1991. Morcom appeared to believe that Brown and Bower had changed their story but eventually realised his error and withdrew his charge. When explaining the “DD” signature Doug Bower pointed out that “Every artist signs his own work”. This immediately bought a question from Chad Deetken as to whether or not any formation had ever appeared with the “DD” signature which Doug Bower had not made. Doug Bower replied that to his memory there was none but that hoaxers had copied them before and it was therefore conceivable that they might be adding fake “DD” signatures to add authenticity to their hoaxes. This didn’t satisfy Deetken or Morcom and another argument arose. At the end

of this argument Ken Brown summarised the reasons why he and Doug Bower had organised the meeting:- “Things can get impossible with some people, I’m afraid. We’re getting to that stage where we’re going to have to say what we believe - and you’re going to have to take it. Its no good taking a point for the next fifteen minutes - all we can say is what we have to say. We’ll say what we have to say. If you don’t like it you can lump it. You know we really don’t care. We have come tonight out of good will, putting our money on the line. I’m saying this from the heart, not knowing whether we’ll get our costs back. We are here to tell our story. Its only last week and tonight we’re going to tell our story as far as we’re concerned as after tonight I’m retiring from the corn circle fraternity, totally. I have no more interest in it because I’m a hundred per cent convinced that Doug is telling the truth, that Ilene’s telling the truth, that these circles, (sic) photographs really are Doug’s, that all this equipment is Doug’s, that the story is true and therefore to me, beyond a shadow of doubt, the whole story is true that they started corn circles. A lot of you people may disagree, you may have your own belief systems, you may have your own reasons for disagreeing. That is no reason for us to fall out, that’s no reason for us to hammer a point for ten/fifteen minutes .. we’ll just have to agree to disagree, and frankly I don’t give a toss because I’m getting out of it, and if you people want to go out in the fields swanning around, praying, whistling, listening to sounds in the dark, seeing lights in the sky, feeling better, feeling worse [that’s] fine, I really don’t mind - its your life its not my life, and I don’t wish us to fall out about it tonight.”

Stanley Morcom’s attempt to respond to this statement was objected to by the audience. Ken Brown then summed up how the Doug and Dave story broke in August/September 1991. Finally, in response to a question from Chad Deetken, Doug Bower admitted that he and Dave Chorley had both made £ 3,000 from TV appearances and newspaper articles. At this point my bootleg copy of the meeting finished. Thanks for the tape recording M.I.5. PF.

Windmill Hill, Avebury, Wiltshire, 17 July 2004.

Pewsey White Horse, Wiltshire, 20 July 2004.

Confession Time

(by Paul Fuller)

[excerpt from *The Crop Watcher*, Issue number 23, Autumn 1994]

As promised in a previous issue your Editor hereby offers himself for public flogging for all his Crimes Against Cereology. For too long I have highlighted the crimes of others, their lies, the deceptions and the belief-centred nonsense. Well, now its my turn. Here it goes ! Looking back over my eight years of involvement with the crop circle phenomenon I have to admit that I have very mixed feelings about my achievements and failures. I don't think I can hide my disappointment that so many crop circles turned out to be man-made. Of course it would have been so so easy for me to adopt that favourite position of the armchair Skeptics by saying "I don't like the look of these circles, therefore they must all be hoaxes", but don't believe what you may have read elsewhere, that is not how science is conducted.

When I first became involved in circles research in late 1985 I quickly learnt from Jenny Randles that some circles were definitely man-made. This fact always underlined my attitude towards the subject and I took great care to ensure that I left plenty of evidence to demonstrate this fact. I always knew that some circles were hoaxes and I always considered it possible that a great many circles might turn out to be hoaxes. Despite this it is instructive to see that some observers (eg Robin Allen in The Skeptic, and Jim Schnabel in Round in Circles) have totally rewritten crop circle history to omit this fact, for reasons best known to themselves. It was blindingly obvious to anyone with the slightest grain of intelligence that peculiar circular markings in fields could easily turn out to be man-made. I said as

much in my outrageous 1985 letter to the Editor at TVS News in Southampton, when I dismissed all the Cheesefoot Head circles as night-time hoaxes perpetrated by low flying helicopter pilots !!

Despite my initial pro-hoax views I quickly became open to alternative explanations when I was introduced to eye witness testimony, historical crop circle cases and Ian Mrzyglod's work. As so many of the early crop circles were relatively simple, and as there were some precedents for what was happening, I soon accepted that many circles might turn out to be meteorological in origin. It was certainly my scientific duty to see just how far this hypothesis could account for the evidence, and I am proud of the fact that Jenny Randles and myself are the two primary researchers who examined this theory and promoted it in the public arena. Despite claims made by some observers, we always disagreed with Meaden over the extent of hoaxing whilst giving Meaden the benefit of the doubt. In the absence of strong pro hoax evidence prior to circa 1990 I think we did the right thing.

In those early years I produced several published articles promoting both hoaxing and meteorological explanations. As speculation goes these articles were reasonable attempts at trying to understand some complex issues. However, on reading these articles now, seven years later, it is blindingly clear that my biggest error in the 1986-89 period was my failure to exhaustively test possible circle-making methods and to test these methods on the established researchers (a la Wessex Skeptics). By failing to do this I allowed myself to be swayed by Meaden's atmospheric vortex theory to the point where I accepted that many of the relatively simple formations I was seeing were "genuine". Of course, evidence remains which suggests that Meaden's theory is still valid for some cases, but it is still disappointing to realise that I was as guilty of promoting key falsehoods as everyone else. Of course, its easy with hindsight, but I do have some excuses.

To begin with, I was the only active circle researcher living in the Hampshire / Wiltshire area who was open to the idea that perhaps many circles were hoaxes. To make experimental circles would have been a difficult and risky business given the mystery mongering of other well known pundits. The last thing Jenny and I wanted to do was to help fan the flames of a silly season story, something the New Scientist had already accused BUFORA of doing in 1984. Of course, nothing could have been further from the truth. BUFORA was the only serious research organisation that had even bothered to investigate the phenomenon, and we had already spoken out publicly about both hoaxing and meteorology (something the official Skeptics have now totally written out of crop circle history in their attempts to de-bunk all crop circle researchers and all crop circle evidence). As I was soon to discover, once that term UFO is associated with an anomaly a very peculiar social reaction occurs whereby anyone associated with that anomaly is deemed by the Skeptics to be in league with the Devil ! If you don't believe this try reading Robin Allen's vicious and inaccurate article in The Skeptic !

During the mid 1980s Jenny Randles and myself demonstrated our concern that many circles might be hoaxes by proposing several methods of making crop circles. It was in response to our discussion of these possible methods (in "Mystery of the Circles", BUFORA 1986) that the BBC twice hired helicopters and would-be circle makers to see what could be created under test conditions. Again we have never received the slightest degree of credit from the Skeptics for our suggestion that researchers should attempt to replicate "genuine" characteristics - something we were simply not resourced to do ourselves.

Looking back on those crucial early years I believe now that we were both severely misled by the poor quality of the 1983 Westbury hoax, where hoaxers left damaged crop despite making their circles in broad daylight. This event substantially reduced our expectations of what hoaxers could do at night, particularly given the extensive experimentation into methods of making crop circles which Pat

Delgado discussed at the “Open Meeting” held in Alresford. The failings of this evidence mislead us all for years. Despite this, we discussed hoaxing in virtually all our written work and in almost all our media interviews. It is sad to see that our concern with hoaxing at this early stage in the development of the mythology has subsequently been totally written out of the history of the subject.

Looking back I can see all too clearly what went wrong. One of the characteristics of anomaly research is that the moment an anomaly is labelled and identified an incredibly emotive debate is generated where both proponents and Skeptics adopt extreme polarised positions. I saw this happening from a very early stage and was quite powerless to stop it. On the one hand we had the Flying Saucer Review team insisting that crop circles could not be hoaxes and just had to be the result of an alien controlled force, whilst on the other hand the official Skeptics were insisting that crop circles were not the result of an alien intelligence and just had to be hoaxes ! There was no middle ground, no reasoned argument about the facts, no understanding that in science several anomalies can often be lumped together under one explanatory heading.

During this very early stage I was thrown into a vipers nest, forced to decide whether the public debate over the cause of the circles was more important than the actual investigation of the circles. Deciding which of these two options to take was probably the most difficult choice Jenny Randles and I faced, but ultimately I suppose we tried to do both, with the inevitable result that we failed to fulfil both aims. We allowed the crop circle mythology to develop into a world-wide hoax whilst at the same time we failed to fully test all hoaxing methods. Of course its one thing to discuss numerous possible circle making methods in print but quite another to actually try those methods in the classic scientific manner.

By failing to construct circles I was not only guilty of misunderstanding what experienced hoaxers could create at night but I was also guilty of promoting the myth that “bent but not broken”

was synonymous with the “genuine” phenomenon, something which has now been proven to be untrue on numerous well-documented occasions. I regard these two errors as my primary mistakes. However, the fact that I was all on my own, both physically and philosophically, meant that the opportunity to test these methods and assumptions about what hoaxers could and could not do was always restricted, particularly given my lack of time and resources.

Being asthmatic I imagine that I might be capable of making say a 10 foot diameter circle on my own, but even this would have left me totally exhausted and feeling pretty awful for some time afterwards. Making several circles to “test” the leading researchers would have been a physically challenging task. Of course, there were no official Skeptics or Magonians around to assist me or to suggest further avenues for research - they were too busy sitting at home watching TV!

In the early years I did visit crop circles, but as many appeared in the Cheesefoot Head punchbowl and as this area was allegedly out-of-bounds to researchers, I never went inside the Cheesefoot punchbowl circles - I merely trusted the abilities of my fellow researchers (something our oh-so-clever Skeptics have never realised !). Had I actually visited these early circles I would have discovered Matthew Lawrence’s observation that many of these “pristine” circles exhibited damaged crop, muddy footprints and suspicious underlying tracks (something other researchers cleverly managed to miss or cover-up). I did notice a lot of damage in the 1987 South Wonston circle but I wrongly concluded that because it was so close to the road and housing that it had been damaged by subsequent visitors. Would be researchers note - you can’t do your research from a car parked at the edge of the field and you can’t assume that the evidence you examine is uncontaminated - it normally is!

Looking back on this period I realise now that as Andrews and Delgado became increasingly outspoken about the circles they were

finding, I drew back realising (with utter horror) what they were going to do. My caution and concern about their activities actually led to me distance myself from the research and investigation that I should have been doing. This is not to say that I didn't visit circles at all - I certainly did - but the fear that I would find myself in the middle of a field with two people I deeply mistrusted had a strong negative effect on what I should have been doing.

During these early years, as Doug and Dave began making circles across a progressively wider area, I was severely restricted in terms of time and money. It wasn't until late 1985 that I had my first car and I well recall trampling up from the Percy Hobbs bus stop in July 1985 searching for my first circles (a quintuplet on Gander Down). It was a frustrating experience. However, even when I joined forces with Terence Meaden in 1986, it wasn't long before the Wiltshire hoaxers began hoaxing and many of their circles were a good hour or two away from my home. Unlike many other circle researchers, I was unwilling to allow my spare time hobby to interfere with my career with frequent nocturnal trips and circle-watching activities. I think this attitude was perfectly reasonable as there were others who were doing the basic investigation and I had high hopes that the phenomenon would soon be satisfactorily explained to the public at large.

Little did I know how those pretty little circles I was visiting would turn into a Great Filthy Hoax which would spread out around the world bringing wealth to a few but disaster to others. Looking back on it all now I wonder what would have happened had I done the correct thing - given up my job and camped out with a pair of infrared binoculars in the copse half way down Cheesefoot Head. What would have happened had I seen Doug and Dave coming down the hillside to make a formation ? Would I have been brave enough to tackle two complete strangers in the middle of the night a mile from the nearest habitation ? Would I have been able to persuade these two men to stop their circle-making on the basis that they were helping others to discredit "serious" UFO research (no, don't laugh) ?

Who would have believed me if I had obtained this “proof ” that their precious circles were actually man-made ? Would Andrews and Delgado have stopped their reckless promotion of the subject if I had proven to them that one of their “genuine” circles was really man made ? Would other hoaxers have stopped what they were doing ? Somehow I doubt it, and we can just imagine the official Skeptics recompensing me for the loss to my career such actions would have entailed.

Those early years were deeply frustrating. I remember having an almost permanent headache in the summer of 1987 as I saw what was happening. How could I stop what Andrews and Delgado were doing ? I was desperate to convince them to think again about their extraordinary interpretation of the evidence, but they simply ignored the evidence I sent to them and in the end they forced me into a position where I was left with no choice but to publicly slate them for what they were saying and doing, something I had hoped to avoid with my letters to them.

It shocked me to see the way Andrews and Delgado were promoting an extraterrestrial solution to the evidence without the slightest regard for more mundane explanations or the credibility of UFOlogy. I tried on several occasions to convince them to think again, but in the end this just made for more trouble in a very big way. It was during this period that I would have valued some help from the more rational elements of the UFO community - perhaps from those clever know-alls at Magonia or even the official Skeptics - but instead I was left to do everything myself. Of course in real life the cavalry never come just in the nick of time, yet now these very same people are the ones who are criticising and jeering ! What [...] they were !

So, now it is all over. I witnessed the birth of a social myth, a new religion, another extension to the overpowering UFO mythology. It was as if I had been there in the late 1940s when Ray Palmer and his associates invented the UFO myth with their fraudulent promotion of Schirmer’s fictional story about aliens kidnapping

humans into their underground bases. I saw the way in which the public were lied to, repeatedly, and how the British media, with its exceptional arrogance and stupidity, gave a handful of extra-terrestrialists everything they needed to promote themselves as world famous researchers. I can never forgive these people for what they did. They put UFO research back by fifty years with their actions.

Looking back on it all I don't think there is much more I could have done. Having made my two main errors I don't think I had the resources to work out what was really happening. I don't think I could have stopped the world-wide hoaxing that has developed. I don't feel that UFOlogy deserves much credit for the way in which believer groups like FSR and Quest International leapt to support Andrews and Delgado in what they were saying. These people were all UFO Traitors who cared for nothing except their own bloated egos and their money-making activities. History will recall them as such. I know because I was there.

Successes ?

So, what about my successes ? Well I suppose Jenny Randles and myself were in there investigating crop circles, analysing the evidence and publishing our research before the Skeptics had even got out of bed ! We were always alert to the idea that many circles might be hoaxes and we were always prepared to accept a dual solution of hoaxing and meteorology. In this respect we differed from almost all the other crop circle researchers who had already nailed their loyalties to single masts. Of course science often requires dual theories and we were right to adopt such an approach. I suppose we had five main achievements :-

(1) We challenged the popular myth that crop circles were the result of a spaceships' landing marks. We countered FSR's falsehoods in the public domain in the belief that the public were being led down the garden path (something the official Skeptics kept well clear of).

Our aim was to give the public the facts that others chose not to. In doing this perhaps we opened some eyes in the scientific community that not all UFO researchers are maniacs, that UFOs are neither spaceships or nonsense, that in some cases obscure but objectively real phenomena may lie behind those reports.

(2) We suggested experiments to test hoaxing methods and we published evidence about hoaxing (eg in “Mystery of the Circles”, BUFORA 1986). We were the only researchers who even considered that hoaxing might account for crop circles - a stance which soon bought us ridicule and despicable tactics from some of the other self proclaimed researchers who had attached themselves to the subject.

(3) We tried to rescue some credit for UFOlogy, as we very quickly saw the potential for the crop circles to totally discredit the serious side of UFO research (as well as the historical evidence, which we always felt was possibly more representative of the true phenomenon than the more outrageous hoaxes which others were eagerly promoting). This was one of the reasons behind our aggressive public stance against those who accepted without question that crop circles were caused by space- ships. In my opinion our best media achievements were

- the 9 July 1989 article in The Times, which challenged the FSR team for its unprofessional dismissal of eye witness testimony and the extent of hoaxing (another crucially important media quote which the Skeptics totally ignore with their rewritten crop circle history);

- the item on the ITV network news in 1989 when ITN science Editor Lawrence McGinty promoted Meaden’s meteorological theory and hoaxing as the solution (ditto) - I remember dancing around my flat with joy after that one !;

- our part in the 1986 and 1989 BUFORA debates, which were an attempt to stimulate a proper scientific debate which (tellingly) the

Flying Saucer Review team and the official Skeptics never reciprocated, but which bought us credit from scientists like Dr Paul Mason at the Met. Office in Bracknell, - and

- my first solo “live” TV interview, where I discussed eye witness testimony and hoaxing before Doug and Dave came forward (TVS News, 19th July 1990).

(4) We also did things that no other crop circle researchers did, eg we conducted surveys, examined historical cases and we published all the pro-hoax evidence (years before Doug and Dave came forward). In effect we evaluated ALL the data, proposed quantifiable hypotheses and continually emphasised our belief that there was a rational explanation for the phenomenon. We took a particular interest in the sociology of what was taking place. In short we witnessed the birth of a new supernatural mythology - a subject of study in its own right. Despite Robin Allen’s ludicrous comments in The Skeptic we spent many hundreds of unpaid hours of our spare time circulating crop circle evidence to researchers all over the world. Science would have expected nothing less of us.

(5) We took Meaden’s controversial meteorological theory and used it to try and explain numerous high strangeness UFO reports. This approach is something that proper scientists should still be doing, although the Skeptics have treated this work with utter contempt whilst failing to explain why these explanations are (apparently) so wrong. In my view this is work that deserves to be continued, regardless of the jeers of the Skeptics, whose failure to properly falsify scientific evidence is legion. Note that none of these things were ever done by the official Skeptics, who avoided the crop circle debate for ten long years. Presumably the Skeptics’ failure to contribute to circles research was largely due to a fear that they might be wrong ! Yet now opinionated know-alls like Robin Allen are actually trying to claim the credit for having exposed mass crop circle hoaxing ! To summarise I think any future historian of the subject who works through my 30 box files of crop circle material, my media

interviews and my published work is going to have a tough old time trying to evaluate my “contribution” to the subject. I think the real problem is that I could never really made up my mind whether what I was seeing was hoaxed or genuine. I never had the time and money to do everything I wanted. I know I got a lot of things quite wrong, but I also got some things right. To be dismissed by Robin Allen as just another True Believer in the mysterious circles is perhaps the final insult in the long and troubled history of our subject.

NEWS

‘There’s a hole in my buckwheat’

By Bill Browne

RING RIDDLE: Aliens or hoaxers?

Close encounters of the screen kind for a determined saucer-seeker...

By Sue Wilkinson

A British newspaper dated 26 June 1989 announces the publication of Circular Evidence. *Aliens or hoaxsters? The circles that caused amazement were still circles. Copyright: Francesco Grassi.*

APPENDIX D

Ken Brown: letters

1. Letter to all researchers (20th August 1993)

HAMPSHIRE BINDINGS

KEN BROWN

TO:- ANDREWS, COLIN — 20th August 1993
ANDREWS, RICHARD
COX, RAY (Letters - The Circular)
DARWOOD, UNA
DAVIES, BARBARA (Sec. CCCS)
DELGADO, PAT
DEVEREUX, PAUL
DUTTON, ROY
FULLER, PAUL (The Cropwatcher)
GOOLD, RITA
GREEN, MICHAEL
HADDINGTON, JOHN
HOLLANDS, JO
IRVINE, ROBERT
KERR, MONTY
KINGSLEY, BOB
KRONIG, JURGEN
McNISH, JOHN & JANE
MEADEN, TERENCE
MORCOM, STANLEY & SUZIE
MICHELL. JOHN
NOYES, RALPH
LAWRENCE, MATTHEW
PARGETER, ROLAND
PRINGLE, LUCY
RANDLES, JENNY
RENDALL, PETER
ROY, ARCHIE
SCHNABEL, JIM
SHEVELAR, SIMON
SUSSEX CIRCULAR (CCCS)
SMITH, T.DAN
TAYLOR, BUSTY
TRUBRIDGE, TOM
TUERSLEY, DON & PSG
U.S.A. CCCS CO-ORDINATORS
WARD, MARIA
and last, but never least - WINGFIELD, GEORGE (Ed. The Cerealogist)

Dear all,

We just couldn't go out quietly - so here's a final valediction from Doug Bower and myself in the form of copies of letters and other 'memorabilia' you might want to keep as curiosities or perhaps instantly throw in the bin! Could Doug really have 'stumbled by accident' across these 16 Circle sites, some 130 miles apart and just when the Circles happened to be there - and two of them for less than 24 hours only! - over a period of nine years from 1980 through to 1988? Come on now. Be brave and face the facts. He was able to take these photographs because he KNEW the Circles were there, because he and Dave Chorley HAD PUT THEM THERE. And if Doug and Dave put them there then ALL THAT FOLLOWS IS A COPY of their original hoax, no matter what belief systems and mysteries you heap on top of it all. (And yes, Doug does have the negatives.)
Bye-bye all, and best wishes from
KEN BROWN & DOUG BOWER

RINGBINDERS, SLIPCASES, POCKETS, FOLDERS IN PVC, CLOTH, REXINE OR LEATHER

TO:

ANDREWS, COLIN

ANDREWS, RICHARD

COX, RAY (Letters - The Circular.)

DARWOOD, UNA

DAVIES, BARBARA (Sec. CCCS)

DELGADO, PAT

DEVEREUX, PAUL

DUTTON, ROY

FULLER, PAUL (The Cropwatcher)

GOOLD, RITA

GREEN, MICHAEL

HADDINGTON, JOHN

HOLLANDS, JO

IRVINE, ROBERT

KEEN, MONTY

KINGSLEY, BOB

KRONIG, JURGEN

McNISH, JOHN & JANE

MEADEN, TERENCE

MORCOM, STANLEY & SUZIE

MICHELL, JOHN

NOYES, RALPH

LAWRENCE, MATTHEW

PARGETER, ROLAND

PRINGLE, LUCY

RANDLES, JENNY

RENDALL, PETER

ROY, ARCHIE

SCHNAEBEL, JIM

SHEVELAR, SIMON

SUSSEX CIRCULAR (CCCS)

SMITH, T. DAN

TAYLOR, BUSTY

TRUBRIDGE,TOM

TUERSLEY, DON & PEG

U.S.A. CCCS CO-ORDINATORS

WARD, MARIA

and last, but never least - WINGFIELD, GEORGE (Ed. The Cerealogist)

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Bye-bye all, and best wishes from

KEN BROWN & DOUG BOWER

2. Letter to Pat Delgado (20th August 1993)

20th August 1993

Dear Pat,

Doug Bower tells me that when you two met at or near Chilbolton some time last year either you or your daughter accused Doug of never furnishing proof that he and Dave Chorley had actually created the TODAY Laddergram in Kent, the one about which you were reported to have exclaimed "No human could have done this."

Some months ago I personally visited the TODAY photographic archives at Wapping and purchased a representative few of the many photos taken by the TODAY photographer on that September day in 1991. It was interesting that the supervisor noted I was the first non-media person to view the negatives - neither you or George Wingfield, nor any of your repesentatives, had visited these archives to check the truth behind the published story. Instead both you and Wingfield prefered to embark on a Lecture round and publish magazine articles which made mockery of Bower and Chorley's claims to have fooled you with yet another man-made Corn Circle. To put the record straight I am enclosing photostat copies of some of these photographs which clearly show Bower and Chorley in the process of making the TODAY Laddergram, including helicopter shots taken some time after you left the scene. We exhibited these photographs at our two recent public meetings in Marlborough and London. Will you still pretend you were not taken in by a man-made Circle, or that it was too hazy and dark for you to see properly?

It is apparent that your lack of proper research and investigation (and Wingfield's lack too, of course) into such a simple matter is just a continuation of your attempts year after year after year to hide yourself from facing up to the bald truth. Far better from your point of view to keep the dream alive by suggesting you were the victim of a deception/cover up/lies/MI5. Will I be the next to be accused?

This subject of crop circles should have been closely investigated, wrapped up and put away as a man-made joke at the latest by mid 1983, soon after Quintuplets started to appear. You must have known well before then that underlying tracks were present underneath every Circle - or didn't you look in those days? Did it really take you a full 11 years till 1982 at Lockeridge to realise these were a man's foot-traces towards the centre? And what about the connecting pathway between the satellites. Even an 8 year-old would think that someone had walked round in a circle, marking and measuring at the end of a string. Didn't you? A Woomera scientist - working later with a Chief Electrical Engineer?

Doug constantly wonders why your 'scientific' investigations weren't up to recognising that if Circles continued to appear in the same fields for year after year then the best way of finding out HOW they appeared would be to place a long term watch over the site. You knew that Circles appeared only at night and regularly close underneath the White Horse and in the Punchbowl. Wouldn't any investigator worth his salt (and particularly 'scientifically trained' investigators) have made such a watch a first step? Or is the real truth that you didn't want to know?

Your naivity, if that's what it was, has been astounding. You, Colin Andrews, Meaden, Richard Andrews, Taylor and Wingfield i.e. the most prominent leading researchers, deserve the severest censure for propagating in the public domain your own private belief systems under the guise of 'scientific' investigations. You all belong to a long list of charlatans who will be found out and vilified in the end. Future generations will wonder how anybody could have been so daft!

Dear Pat,

Doug Bower tells me that when you two met at or near Chilbolton some time last year either you or your daughter accused Doug of never furnishing proof that he and Dave Chorley had actually created the TODAY Laddergram in Kent, the one about which you were reported to have exclaimed “No human could have done this.”

Some months ago I personally visited the TODAY photographic archives at Wapping and purchased a representative few of the many photos taken by the TODAY photographer on that September day in 1991. It was interesting that the supervisor noted I was the first non-media person to view the negatives - neither you or George Wingfield, nor any of your representatives, had visited those archives to check the truth behind the published story. Instead both you and Wingfield preferred to embark on a Lecture round and publish magazine articles which made mockery of Bower and Chorley’s claims to have fooled you with yet another man-made Corn Circle. To put the record straight I am enclosing photostat copies of some of these photographs which clearly show Bower and Charley in the process of making the TODAY Laddergram, including helicopter shots taken some time after you left the scene. We exhibited these photographs at our two recent public meetings in Marlborough and London. Will you still pretend you were not taken in by a man-made Circle, or that it was too hazy and dark for you to see properly?

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3. Letter to Una Darwood (20th August 1983)

Dear Una, 20th August 1993

I promised to respond to the letters you have sent through during the past few months, in the main enquiring if it could be arranged for you and others to meet with Doug Bower (and maybe Dave Chorley as well) to watch them produce a Pictogram - or alternatively to meet with Doug and Ilene on a private social occasion, but again with the view of asking questions which you might still feel relevant.

You will remember approaching me at Marlborough to ask if I would ALLOW Doug to arrange such a meeting (jokingly, I hope!) but you were quite right in supposing that we discuss all such matters together, and that I offer friendly advice to him as a safeguard against the more extreme of the Circle fraternity. For 15/16 years both he and Dave remained completely unaware of the hysteria they were causing, and they are still bewildered at the contents of Circle magazines and Conference agendas which invoke a supernatural background to their Corn circles - after all, it's only flattened corn for heaven's sake! So I suppose I try to help Doug understand this crazy side of people, that's all.

Anyhow, to come to the point. At our London meeting Stan Morcom came with Suzie and Lucy Pringle, and I'm afraid Stan made a complete idiot of himself. He ranted and raved standing out of his seat, even marching to the front of the audience to brandish papers at Doug and me. He accused me of lying on two occasions, which I do not do. He abused Doug for not answering one of his facile questions fast enough (about exactly how many D & D signatures they did, will you believe?). His tirade continued as to why Doug couldn't recollect how individual Circles had been laid back in 1989 and 1990, in spite of these being only two out of many hundreds over the years; in spite of the work being done in the partial light of night; in spite of the designs being changed to suit the circumstances of time, weather, slope, beer consumed, lights, cars, etc. It was a typical mindless attack from somebody who is not prepared to consider there is a mundane side to human Circle-making - a typical attack from a bigot who once told me that because HE can't see in the dark then nobody else can either (sic). He then misinterpreted a couple of Circle events he and I had talked about previously and he turned the facts inside out because his irritations were so hot. Thank goodness he appologised on yet another occasion for getting one more vehement accusation completely wrong, and thank goodness his sensible wife Suzie appologised for his behaviour in an aside to me just as he stormed out. Morcom is, of course, now guilty of adopting exactly the same style of wild assertions made by Andrews and Delgado. He behaved so ignorantly and boorishly that I will have nothing more to do with him.

Doug and I risked our own money (we lost £5 overall) to reveal all our evidence at those two meetings, but it is clear that the vast majority of Crop circle enthusiasts just do not want their enjoyment to be spoiled, for instance by facing squarely up to how Doug just happens to have photos and negatives of previously unseen Circles such as the 1980 Punchbowl, the first at Westbury in 1980, and all those others from the early 1980s. We did our best to show the true facts to you all, and still Wingfield, Green, Delgado, Andrews C. & R. etc. refused even to look. This, and the regretable intolerance of Morcom, a one-time friend of mine, has finally convinced Doug and me that apart from finalising correspondence such as this we desire no more contact with the irrational behaviour of those in the Circle community.

You will understand better than most.

20th August 1993

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You will understand better than most.

DOUG + DAVE WITH PAT + COLIN!

Believing in ever-decreasing circles

WEEKEND VOICE: Mary Killen

Wordsworth country, Brontë country, James Herriot country, Catherine Cookson country... one tourist board even tried to pretend that visitors were coming to Knott Landing country.

I live in what might have become Crop Circle country, had it not been for the devastating moment in 1991 when two "ordinary blokes" named Doug and Dave came forward to announce that they had made all the circles, and to describe their amusement when they read the circle experts' verdicts that these were "undoubtedly the work of a superior intelligence".

Doug and Dave's emergence was annoying for those of us who had thought the circles might not be man-made. Though my husband's credulity had been stretched when he had heard one expert pronounce that the "snail formation at Alton Barnes was a genuine event", we didn't believe their story. Yet the rest of the populace seemed happy to accept this convenient explanation.

Last week in Marlborough Doug, quite bravely, agreed to appear at his first ever public meeting where he could be questioned freely. I went in the hope and certain hope that I would see for myself that he was a liar or even an MI5 agent, as some of the "experts" believed.

The room was packed to overflowing with people who all seemed, curiously, to be aged either roughly 40 or roughly 70. Seventy is (almost) Doug and Dave's age, so perhaps the older ones were identifying. All had sceptical, un-made up faces. Many of the men's footwear needed cobbling attention but few were in need of a full hygiene overhaul. One man wore a laminated identity badge saying "Organ" in big letters. At last the discussion in the packed hall began. A man who introduced himself as "Ken Brown, Doug's amanuensis", stood up briefly, then said he would be sitting for the rest of the evening because "we have a lot to get through".

"Hmm," I thought. "It's because he can't look the audience in the eye."

Dave wasn't there, said Ken Brown, "because his memory isn't quite what it should be. We know how important it is, in a scenario like this, to get everything accurate. So quite simply he wasn't invited."

This was the sort of thing I had been hoping for. Clear, or almost clear, proof that the stories weren't watertight. Dave wasn't there at all and Doug couldn't be trusted to speak for himself. Yet Doug looked like an amiable old bloke as he sat beside Ken Brown and it, after 40, you get the face you deserve, well, after 70 it would be pretty impossible to look like an amiable old bloke if you weren't one. Later he did talk.

Ken Brown now spoke to the audience almost sympathetically. He knew that there was a great resistance in some people to accepting that the circles were hoaxes. The audiences shifted moodily on their chairs. "Why is Doug here tonight?" asked Ken Brown. "Why has he stopped making the circles?"

The reason, he said, was that making them had become less fun since a newspaper had offered a reward of £10,000 for an explanation to the mystery. Since then every time Doug went out to make a circle, particularly at his favourite local spot, Cheesefoot Head in Hampshire, he had found the fields chock-a-block with crop-watchers hoping to win the reward.

Yet this Doug and Dave had been thwarted, because a solicitor had advised them that their proposed hoax, with its written confession, could be taken as a clear admission of trespass. A magistrate might fine them £50,000 each with three months in jail.

So he was having this question and answer session because he felt it was time the whole nonsense came to an end. He had been "abused", his wife had been insulted. And "there would have been no more circles since 1991 if the Wiltshire hoaxers weren't still at it", he claimed. "We've given up, yet try to tell that to people and it's like stripping away their religious beliefs. People don't want to know the truth. If the 'experts' had really wanted to find out what was causing the circles, why didn't they mount a crop watch on Cheesefoot Head, given that they had been appearing there every year for 13 years? Because if these experts found out what was happening they would be out of a job."

And then the clincher. "We keep hearing that these circles have been appearing for hundreds of years. If that is the case, then tell me why there does not exist in any photographic archive anywhere in the country a photograph of a crop circle made before 1975, the year we started doing them!"

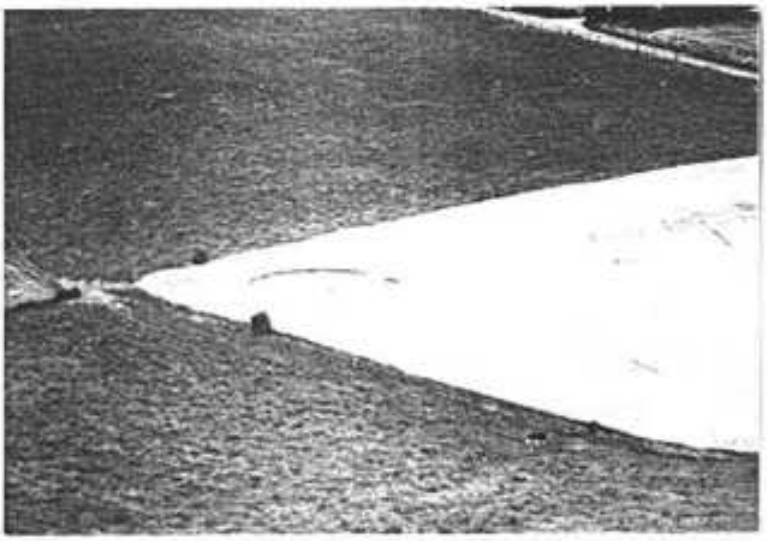
Some of the faces continued to wear forcedly amused smiles, some looked openly saddened and disillusioned, including mine. Why couldn't we have been left to our simple and harmless beliefs that the circles were the work of a superior intelligence? Step forward another earth mystery, this time insoluble, to engage the public. It would be so much more healthy than watching video nasties.

Sat Aug 7th 1993
The Times? or Guardian
not certain

1980
WESTBURY

1

NEVER SEEN
BEFORE!



2

3

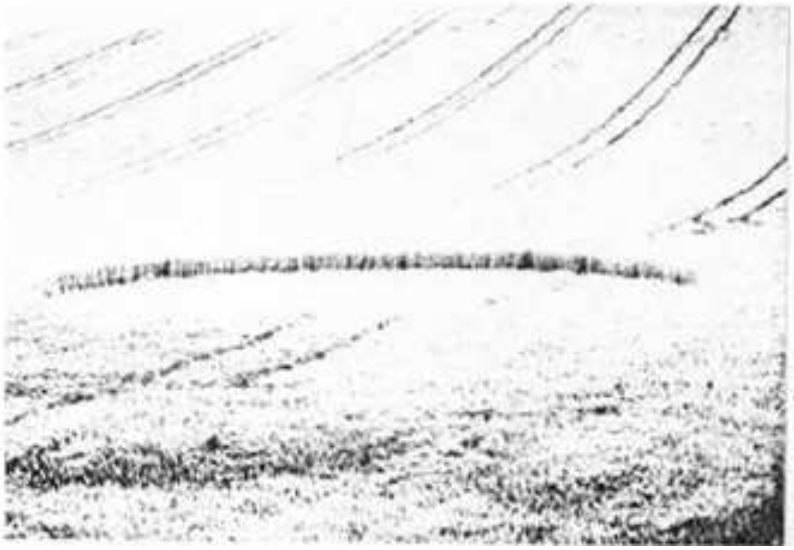
1980

PUNCH BOWL

NEVER SEEN BEFORE!

1981

PUNCH BOWL



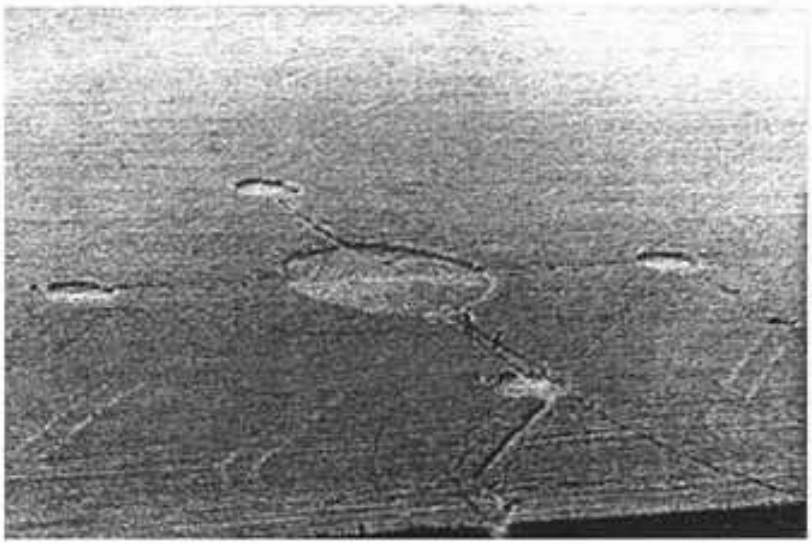
1982

LITCHFIELD

1982
CLEY HILL
NEVER SEEN
BEFORE!

1983
PUNCHBOWL

1983
CLEY HILL
NEVER SEEN
BEFORE!



1984

ALFRISTON

1986

PUNCHBOWL

1986

PUNCH BOWL

1987
PUNCHBOWL
R.H. CIRCLE
NEVER SEEN
BEFORE!

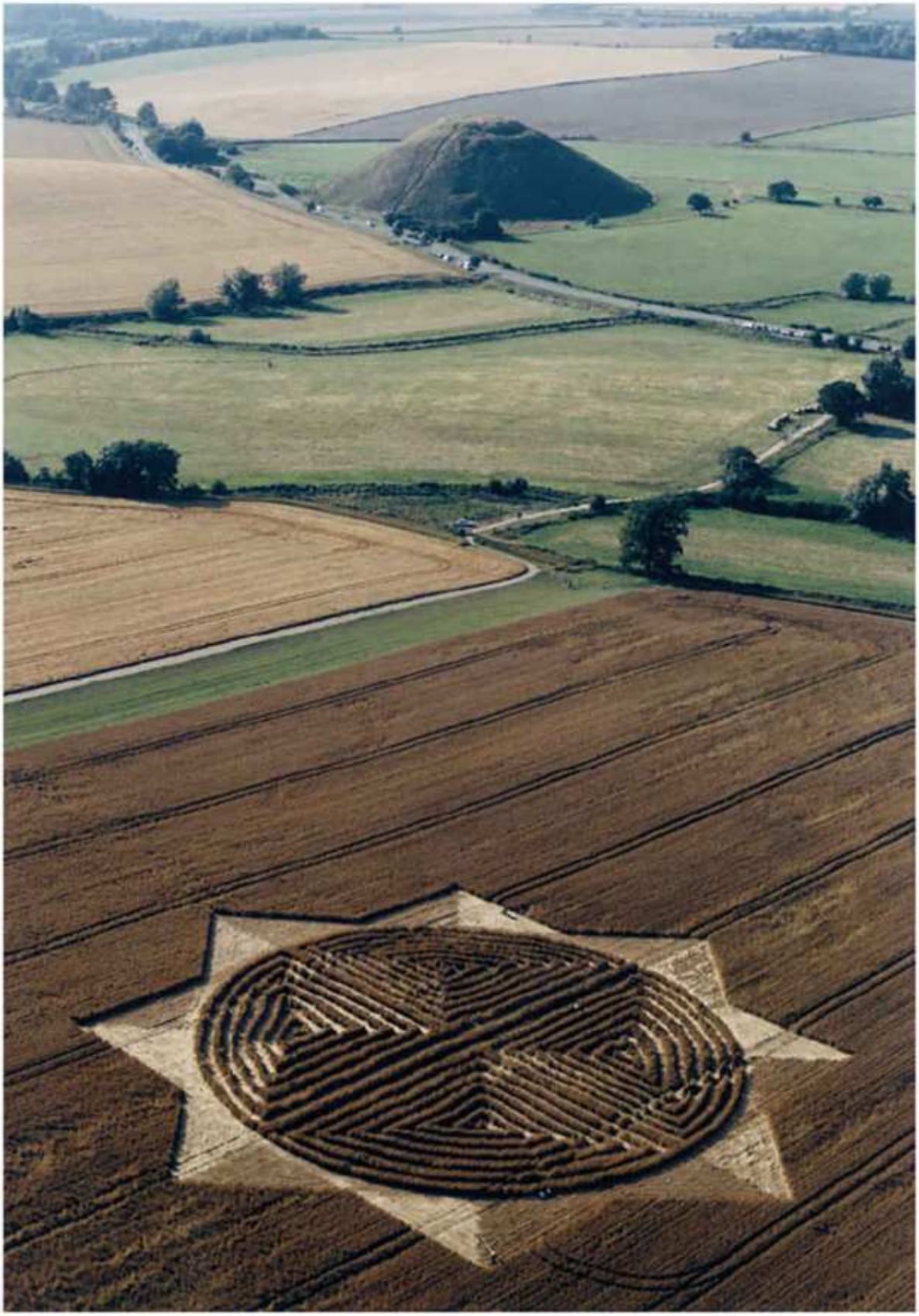
1988
PERFECTED
TRIPLET
AFTER POOR
TRY AT
CORHAMPTON

DOUBLE
RINGER
WITH
TRIPLET
BEHIND

1988
CHARITY
DOWN

EARLY 1980's
THE PICNIC
AFTER
A CIRCLE!

DAVE & DOVE
HAVE THE
LAST LAUGH!



West Kennett, Avebury, Wiltshire, 30 July 2004. Copyright: Andrea Feliziani.

APPENDIX E

Circlemakers: a documentary by Matthew Williams

The ten original interviews can be viewed at http://www.francescograssi.com/ebook/ccsoi/v01/c04/001. Subtitles are available: if they do not appear automatically, please use the Youtube settings to enable them.

1. Interview with Doug Bower

Why did you make the circles?

Well, actually, we lived in Australia from 1958 to 1966, which is eight and a half years, and me always being interested in outer space and UFOs and things, I saw an article in the Australian newspaper one day, about some circles in... some reed beds or grass in Quee... Tully in Queensland, and after reading it of course I forgot all about

it, but when I returned home in 1966 I met David Chorley and he was also an artist, so we had a common interest there, and for the next few years we used to go out on our Friday evenings to have a drink in the pub and talk about paintings. And one day when we were walking on... Cheesefoot Head near Winchester, one summer evening, in the midst of the cornfields, we sat down there and tried to get a bit of inspiration from UFOs and paintings, and I suddenly remembered this article that I read while [I was] in Australia and I said... told him about it and I said it would be quite a good [bit] of fun if we could devise some way of making a circular mark in the cornfields here and so it would arouse a bit of interest. People would think that a UFO had landed during the night when they discovered it the next morning.

So after returning home to my workshop I sort of thought quite a bit the next day as to what we could use to make this circle, so we started off by using my big heavy security bar that was on my workshop door. And our first few circles were made on our hands and knees with this security bar. We were kneeling down side by side, but my goodness, it was certainly hard work. And... but it was quite good fun, because you were down below the height of the corn and if a car was coming down the road and the headlights were surging towards you we used just to say “Down we go!” and just wait for it to pass, and... But for the first two years our circles were... were not seen at all except, I suppose, by the driver of the combine harvester, because we were doing them in fields that were... that the public couldn’t see from the road.

The ideal place of course would be in the Punchbowl at Cheesefoot Head, but at that time there were sheep in there and I don’t think it had ever been ploughed for crops until about the third year. My wife and I drove up past one Sunday afternoon and they were ploughing the Punchbowl and I thought to myself, “I must go back to Southampton to find Dave Chorley and tell him that the ideal spot for doing a circle was now under crops.” So we patiently waited until the spring to see the first corn arrive, and we knew that this would be the

ideal spot to do our circles. And our first circle in the Punchbowl – I mean, it was on the news in the next evening, which pleased us quite a lot, and of course the other place which was ideal for the public to view them was the White Horse at Westbury, and Cley Hill [Warminster], which we did quite a few there as well.

It was all a bit of fun, really, yes. And being circular, and UFOs were circular, we just wanted people to imagine just to... just to believe the next morning that “My God, something’s landed here during the night!” And the fact that it was circular they immediately would think that it was a UFO, because flying saucers were circular, you see, it’s no good doing a square or triangle or anything like that because they wouldn’t cotton onto anything from outer space and, as I say, once the news broke it gave us quite a fillip, you see, and... to carry on, because Dave Chorley said to me one day, he says, “I’ve had enough of this,” he said, “I’m not going to keep on doing this,” he said “every week”. He says, “We’re getting nowhere with this, we’re getting no publicity.” I said, “You just hang on a minute,” I said, especially when the Punchbowl’s ploughed, now when we get down in there... And of course lo and behold it was on the, the television news the next night and the news was rapidly spreading around that something was making these circular marks in the cornfields. And of course you know the story from then on, it just grew and grew. And of course the more publicity we got with the media and... newspapers and things, it egged us on even more.

So the circles continued as circles for quite a while, but Dr. Terence Meaden, who was a very clever man as far as weather is concerned, he really got us, because he was saying it was wind vortices, you see, and that... We didn’t like that, so we had to change from circles into something else... [laughs] If you want a cup of tea and a bit of cake, you say so... you break off.

Well, we were so secretive about all this, and... we realised when we started this that no one... no one must know what we were doing and... Otherwise it was going to spoil everything completely. And

then we said to each other, “But what about our wives?” And I said, “Well, the fact that we go out every Friday evening, they won’t... they won’t be any the wiser,” because that was our usual thing, is to go out Friday evening for a pint of beer and... but it was seven years before my wife really found out about this and... she came to me one day and she said, “This car needs servicing quite a lot,” she says, “with the enormous amount of miles that you’re doing” she said “I’d like to know where you are going in these evenings” and I said, “Well,” I said, “We are journeying around the countryside quite a bit,” and she wasn’t very satisfied with this, so I had no alternative but to hand her the huge album of all the press cuttings, the publicity lovers that we were, and show her, and she said, “Well, this doesn’t mean a thing to me really,” she says, “I know all about the circles,” she says, “But you’re telling me that you and Dave are doing them?” She said, “There’s only one way to prove it,” she says, “is to take me out one night and tell me what you’re going to do.” Which we did, and then it was proved.

But of course it was nice then, because once she knew, although we were only going out Fridays and perhaps other nights, but once she knew about this we could go every Mondays, Tuesdays, Thursdays, Fridays, Saturdays, and we were doing more, that’s when the circles started to increase, because up until then we couldn’t do many circles because we’re only allowed out, so... so to speak, on Friday nights, and someone even made a remark, I don’t know whether it was Pat Delgado or not, but he said, “It’s very, very strange that these circles only seem to appear Saturday mornings,” and of course that was quite true, you see, because it was Friday nights that we started doing the circles, but once our wives knew about it then the circles increased because we were out more nights then than the Friday night.

Just remember that our circles were quite small compared to what’s happening today, and although we were treading down a lot of farmer’s corn we knew... we knew what we were doing as far as a bit of vandalism was concerned but the bit of fun that we got out of it –

out of the small circles we were creating, we didn't seem to mind that very much and... as I say, I wouldn't... I would never dream of doing... seven-hundred, eight-hundred, or thousand-foot-long patterns and things in fields really, because I mean after all it is... it is a form of van... well, it is vandalism, isn't it?

As the years rolled by it was getting more and more difficult. And for instance, in the early days you can back your car into the farmer's field in his gateway, pop out, do the circle, get back in the car again and have a cup of coffee and still stay where you were all the time. But nowadays, the last few years, it would be impossible for you to leave a car... an empty car, if a police car came by now and saw an empty car at one o'clock in the morning they would certainly stop and go back, but in those earlier days no one seemed to take any notice at all.

The money side of it... doesn't really come into, or it never has come into it really, because it was the... it was the laughs and the fun that we had at night. We were aware of it after a while... jewellery being made and tapestry wall hangings and all the rest of it, but as far as we were concerned we were just having a laugh from it, but there was no... there was no way really that we could make money out of it.

[Ilene Bower, Doug's wife:] No, but we were angry that people were using it as a means of making money out of more gullible people, they were forming associations, they were doing, as you said, making... jewellery, posters, T-shirts, all this sort of thing. They were using your creations and people's gullibility to make money for themselves.

Well, they still are, even today...

[Ilene:] Yes, I know!

I had a good laugh at some of the things that they said. I mean, for instance if you see people laying on their backs in the circle joining

hands and doing a dance around, to me that was incredibly funny when I first heard of it, but after a while I got a different way of thinking and I thought to myself, “Well, if this is what they want to make of it, it’s entirely up to them.”

I, guy, can’t understand why it’s got so big, but I can see now that it’s more or less uncontrollable, because these people are going to do exactly what they want, and if they get pleasure from it, OK.

Have you had [abusive] phone calls or letters?

We were very surprised that we did receive two letters from a group called the Black Watch and [they] said that we had to stop making circles in the cornfields. And... it... It did worry us quite a bit because... the way you got to look at this is that if anything happened to us... in any form, then... the suspicions would then go to the people that sent these letters.

Because I’m a wildlife sound recordist and have been for about 15 to 20 years now and... I’m out most nights recording the sounds of deer and mammals and birds and all this sort of thing and... when I went to the meeting at the Guildhall in Winchester one evening, which was the subject of crop circles, they brought up this business about the grasshopper warbler, the sound that they’ve heard up on... Cheesefoot Head near Winchester, and I knew immediately what this was because I’d already recorded this bird several years before and this bird also sings in the night. And when it came to question time after the meeting I walked up to the stage and I spoke to Busty Taylor, who happened to be there, and the other people as well and I said, “The noise that you heard that night was... a grasshopper warbler, because I’m a sound recordist and I knew what it was,” and they did everything but almost throw me out of the Guildhall. But of course there again, you see, I think, the more... the more you can add to this phenomenon, the more interest you’re going to get worldwide from the audiences and you can say that you got damage to your lenses of your cameras and you got... marks. I mean... if you

take aw... get away from the circle business a minute, people have their films developed every week of the year, they have marks and things on their films, which was... which is more or less... [which] can't be explained, but the fact that these people get some marks on them when they're photographing crop circles they try to marry the two together, so... quite honestly, I think it's all imagination and it's just to make things sound a little bit more important than they are.

There was one strange happening one night, when we were doing a pictogram on top of Telegraph Hill and... Dave was over one side of the pattern doing his little bit and I was doing mine... and suddenly I was knocked unconscious and... only for a short time of course. Something hit me on the head, and... I immediately thought that the farmer or the farm workers were approaching us and they'd thrown a stone at me or something but anyway the next thing I knew David was kneeling over me and he's saying "What's the matter?" you know, "What's the trouble?" and... I said, "I don't really know," I said, "Something's hit me on the head." [Then] he said, "But there's nobody about!" But then I started feeling what I thought was blood running all down the back of my neck, and all my hair was full of blood, but of course we didn't know that it was blood because we had no torch and we couldn't use torches, of course, otherwise we'd be seen. And Dave says, "I think we'd better get back to the cars" and I "No, we must finish the pattern, we can't leave it half finished," but... anyway I came to quite well after a bit and... we had about three quarters of a mile journey back to the car and... I said, "Well, we can't see what it is", I said, "until we get back to the car park and switch the headlights on." And anyway when we got back to the car and switched the lights on... "My God," he says, "What a mess your head's in!" I was covered in green like green slime and... plenty of other things intermixed with it. And I said, "We'll get off home now." But of course when I reached home I opened the door and I had to call to my wife and I said, "Don't be alarmed when you see me," I said, "but... I've got some nasty stuff, I said, "all over my head." And anyway she had a look at it and my God, it was really terrible, but... what had happened?

It was a chunk of ice that had fallen from... an aircraft that was going over and how one earth that millions of chances to one of it hitting me on the head, I don't know, but as it was a warm evening by the time that hit me it was just a soft piece of sludge, but it was just enough to knock me out for... for a minute or two and... and of course the air people from the Heathrow completely deny anything falling from aircraft, but as you know there's plenty of reports since of lumps of ice falling through people's... roofs and into their living rooms, but... thank God it was only a just a small soft piece that hit me that night.

And it was of course the chemical toilet waste?

Yes, it was, yes, yes!

Well, although I'm an artist myself, it's a totally different art to what we created in the fields. As I say, the fact that it was circular to start with and UFOs were circular, that was the whole idea behind it and it's what come of it as the years have gone by, but... the recognition that we've had I suppose we've left our mark and... sadly my friend Dave Chorley has passed away, now he's creating circles up in the sky.

What we were doing but... all it is, is flattened corn if you walk in you flatten that, the only difference was the shapes, you know, we love the shapes because that it is artistic value but I mean what these people have made of it was their business mean this just become a big, big laugh as the years go by.

But I'm still here, I'm not creating circles anymore, I'm retired now ah, ah... and... you can believe that or not but... as an artist I create watercolors and oil paintings and also in the fields it's the largest canvas that we've ever had and, as I say, it pleases me to think that this has given pleasure to a lot of people.

Well, I was hoping to be knighted one day by... by the Queen, but I can't really see that happening because I suppose the... the national

farmer's union will create a bit of a fuss then but... never mind, "Sir" Doug, he'll carry on as long as he can, and taking in interest in what other people are doing. Well, time and time again I've told people how these... lots of people say, "How on earth could these two men create circles all around the world?" Well, the answer to that is very simple, because I said it no end of times, but no one seems to take any notice of what I say, not that they want to anyway but... Let's say for instance if we did a circle up on the Cheesefoot Head near Winchester on an evening. We would go up the next evening to have a look at our handiwork and there would be anything up to fifty to a hundred people up there... viewing it, which pleased us no end, and of course we would then rub shoulders with them and they would be from all different parts of the world on holiday. There would be people from Canada, America, Germany, France, and we used to get into conversation with these people and... they used to say to us, "When we get home from holiday we're going to do a circle or two."

And there you are, they've gone back to America, they've gone back to Canada, Germany, likewise Japan and they're treading around just the same as we did and there you have the circles in all the parts of the world not from Doug and Dave, but from the people that came over here on holiday viewing the circles that we made and then they're having a go themselves. They're still doing it today, aren't they?

Yes, when we used to go out to view what we've done the night before as I say, the only people that we knew were researching this was Pat Delgado, Colin Andrews, Busty Taylor who was flying over and Richard Andrews and... we used to get into conversation with these and I mean, they... they must know even to this day that we were frequenting up there and talking to them all the time and I always remember one Wednesday afternoon at Longstock. I took my wife up to Longstock to have a look at the circle that we'd made previous and... I met Colin Andrews up there and he said there was some connection between a bit of a rubbish dump there and the circle that was out in the field. And he gave me his business card,

and he said, “If you hear of any circles roundabout" he said “Perhaps you could let me know." I said, “Yes, I will, because I travel around quite a bit because I’m a wildlife sound recordist,” and of course Dave and I used to do a circle one evening and then ring him up the next morning and said, “Oh, Colin, there’s a circle and such and such,” and he used to say, “Oh, thanks very much, thanks for the information,” which made all the fun.

Well, this is a little bit of the mystery attached to... to this. Although we’ve had a lot of fun out of making the circles over the years, when we started reading reports that some of our... designs and patterns that we were creating had a connection with the Hopi Indians in America, Mongolia, Aborigine tribes, cave paintings, etcetera and what mystifies me most of all is where is the connection of this, why is it that I could sit down and in half an hour create a pattern on a piece of paper, it was just as if my hand was being... forced round with the pen to do this pattern, I don’t know where it came from but then... then you read afterwards in the newspapers and magazines that... it seems there’s a connection between what I drew that evening and what we were going to create in the fields that... with the Hopi Indians and Aborigine people and... it seems to me that it could be a connection between languages but... that mystifies me very much because... it makes me feel as if there’s something unknown to us that we’ve no knowledge at all.

Well, looking back at it all now after all these years, I’ve come to the conclusion that it’ll never end. I’m rather pleased that... thousands of people have found an interest and an enjoyment from it. I hope no one ever gets caught doing it; we had some narrow squeaks [escapes] but... I appreciate the fact that lots of people are more or less depending on this now for their interest. I suppose really it’s a kind of religion but I’ve got nothing against these people and what they’ve made of it. The people that... the bit that gets me most of all I think is the so-called experts. What they’ve built on themselves up as, what they say it is, they seemed to know it all, the media goes to these people but the people that find some enjoyment and pleasure

from it, they're the people that I think are getting something from it and I hope it continues that way, but I don't think it'll never end, it'll never end, it'll go on forever.

2. Interview with Danny

I first saw crop circles when I was back living in Watford and at the time, you know, maybe I wasn't necessarily happy with the way that my life was going, I mean a lot of people do hate, people get to points in it, they want... to put their life in a different tack, they're not completely satisfied with everything and crop circles seem to be like a... like a cosmic battle sign really for... for me, you know, it seems something special and it seemed like some exciting way to go in the car and find out about and much more interesting than the average like Monday life I have been living up to that point, you know.

So, oh God, on pretty much of a whim I sold everything I had, I bought a tent, a rucksack and just hitchhiked up to the area and started camping out and... crop circles started turning up where I was sleeping... and special coincidences and synchronous dreams and... I just in a really magical air and... and I've become more and more absorbed into the area and into the crop circle phenomenon, which... sort of ended up flowering from a belief of it all made by

aliens into... into realizing that they're made by humans, but there's still something magic there because I knew that magic things had happened to me while I was... interacting with them and didn't change when I started... making them either.

It just seems to get more and more strange, you said you weren't going to be able to talk to anybody about it and, so... it was a... yeah, it has been quite amazing the entire journey from me then to me now. It's, it has been very special.

When I first turned up in the area, I... got dropped off below Silbury Hill and so... it was... it was late at night so I bunged my tent up down by the bottom [of the hill] but, well, it seemed very naughty, but I was... ignorant of these... these confines at the time and... camped out... woke up in the morning, climbed up Silbury, because... to see this magnificent monument by the side of the tent, 'cos I was well unaware of it at that time I... arrived there climbed up atop the Silbury Hill and, to see what the view was like and there was the most glorious star-shaped pattern in the field by Silbury and I've only just turned up there and I've, Wow! You know, maybe this has turned up over night, you know, cause there was people in there, and it has turned up and this for me, you know, this is... this is very very special, I ran down there as fast as I could burst in and they got me all the people that were involved in crop circles, and people who were filming and people just visiting in there, in the area and I ended up speaking to... about 8-9 people who were sitting there we were speaking different languages, French and Belgian and German and... and it was really a cosmopolitan sort of atmosphere and everybody was sitting down and talking about... love and life and the hypocrisies of life and... spiritual ideals and all these wonderful things and I just, I remarked at one point to everybody how its fantastic that we're all all here talking like, as a group, as a unified bunch of people, you know, and... the next day when I've seen the aerial photograph it was... in the lay of crop was two doves of peace kissing and so that was like very significant for me because I made

my statement during a crop circle so that was like a very poignant time for me.

I've seen Balls Of Light (BOL) in the field while making and... while just like staying in the area... oh crikey! We've have had... weird things happening with time and, like, you say something and something, a relevant crop circle will turns up, you know, you'll have a dream about something or... something poignant in it and that will be relevant to the crop circle that turns up or... drawing something and the crop circle's turned up, that has happened a couple of times and it was very, very strong, you know, very definite, you know, exactly what you draw, you know.

I had one occasion when I was sitting down with my brother and my brother... couldn't think of what to draw and while he had a blank piece of paper in front of him a cog came off, jumped off, seemed to jump off, a cog hook land on the paper so he drew a cog... and that turned up and I think the overwhelming feeling that the crop circles ended up giving me, was... a sense of interconnectingness between all the different elements, so like, in my life and in everyone else's life, everything around us, it gave a sense that actions or thoughts that we might have, might bear some relevance to something that might, doesn't at first seem like its connected but... connections were made from seemingly unassociated things, people over vast distances and over time and with events that were happening around the world and... people in fields, right next to each other, without knowing each other were there making circles in the same place, you know, and people making the same circle in different places in similar timeframes and it all gave the increasing idea that... all gaps and divides were illusionary, that... everybody and everything was connected in some way or shape, you know.

I bumped into a very naughty person once, called Matthew Williams, who led me astray away from all the believers and from all that hazy view of the world to this much more concise and much more... into... took me into the phenomenon, you know, but a different a view,

different view on the same scenario, a different angle on it, and it seemed to flower even more after that, you know, take on all new possibilities, you know, and all sorts of new kinds of magic started manifesting and it took on a whole new slant, but still just as, just if not more, more fantastical and amazing and coincidental and synchronous and telepathic and... and took off into a whole new realm and yeah really it was Matthew Williams that sort of, really encouraged me and allowed me to flower, as it were...

[Matthew Williams: I'll just going to have to get my ten pound out of my pocket.]

Yeah, you know what I mean, it's true though, it's true Matt, you know what I mean, it's no use denying it, is there? You're the one who who really said there is not much like though.

I think the real motivation to go to so much effort is the idea of being able to do something for somebody you don't know, that you've never met and maybe you'll be never likely to meet, something that hopefully would be positive in their life, will help them, maybe heal them, take them onto a new level, help them meditate, just give them a calm moment away from everything, just to do something positive, completely selflessly for someone else is just the most wonderful gift in the world and also another reason for doing it, is because it hopefully opens people's eyes to new subjects, new ways of looking at things, new ways of viewing art, new ways of thinking, new ways of behaving even, with meditation and and how we interact with nature and it works on so many different levels and there's so many positive messages that are interwoven into the matrix of crop circles, that there is more reasons to do it than not to.

Well, some people see it as a joking around, as... a fooling people if you like, but I don't see it like that, I see it like a... in my personal experience I went through the process and it gave me a lot to go through the process and I benefited from it and so, to allow other people to go through that same mechanism or thought process, I

think it would be great. No, I don't see it as a joke and I don't see it's being shamming people, it's a wonderful, beautiful, special, magical... land, place and experience to interact with these things, it's not a joke, it's more than that, it's beyond a joke, it's bigger than a joke, you know, it's... this is something quite divine, something quite special and subtle and magical, you know, it's not a joke.

No, I don't see it as pulling the wool over people's eyes; I see it is hopefully opening people's eyes up to many many other things that are usually missed in normal life. It's not a dece... it's not a deception, it's like painting a picture and then saying that that image is a false image, no image is false, all images are there and they're to be viewed and to be and to be taken as what you believe them to be and that's completely, you know, your role, you know.

It doesn't anger me that people make money out of crop circles, I think it is good thing especially if the farmers manage to charge and get something back for the little bit of damage that's been done, and if people can find a way of passing it out to people, informs the media, then you know, they should be paid for their services because it does need to get out there after all, so yeah, I mean, it enables things to get out there and information and images to get out there, and... no it's not a bad thing at all no.

It doesn't bother me what other people believe, I wouldn't say it, the word was "bother" me, I care... about what other people think about, I hate to think I was having a negative effect on anybody or on their feelings, so in that way, yeah, I care, but I'm trying not to get too het up about people taking it the wrong way, you know, but... people don't, you know. Cause sometimes... sometimes some people take it as an offence that maybe you're deceiving them, or... or trying to fool them or trying to humiliate them, but if people knew the motivations behind you're doing it I don't think they'd view it so harshly, you know.

No, I don't crave publicity in any form no, it's not where I'm coming from, it's not my bag old man. I think the most important thing about what other circlemakers bring is diversity, different view points, which is very important, otherwise you become stagnant in your... in your overall view, you need new blood and new, ain't not the right term but, you need new life ever so often to keep it spasmodic, to keep it on the edge, so keep it special and interesting. So I think it is vitally important that there's a wide range hopefully of... different minds and different mind sets and artists and groups of people out there interacting with these medium, otherwise you're going to end up with a very linear and very maybe sometimes stagnant, if you are not careful, art form.

I think circlesmakers could be unconscious channellers. I can only really speak for myself in that I have had quite a few experiences where we diverted or gone away from the planned course and it seems to have become relevant at a later date the changing pattern or changing pictogram or picture, it seems to have some sort of meaning that it wouldn't necessarily have had, so in that period when we weren't necessarily going with our plan, special things seemed to happen that seemed to be relevant later, but also sometimes you might do a drawing and then someone else will do that design before you have even had the change to do it, so... I certainly think there's a lot of telepathy or really channelling there might be some interaction at some level with... this other consciousness, it does seem to be another consciousness interacting in both the circlemakers and the believers at some level, it seems to kind of have a giggle with people, you know, have a little laugh with people, the coincidences are too often and too prevalent for it to be telepathy, because I'm not telepathic I don't believe I'm telepathic but things happen, you know, that shouldn't happen, but they do so maybe on some levels there is a truth in that, you know.

I can certainly see the phenomenon growing... from this point onwards, I can see it manifesting in different countries, maybe in different formats as well, you know, but I can certainly see it's

spreading to different countries and involving a lot more people it's got an enormous amount of scope to develop into many, many different art forms, art and form and geometry are basically infinite as is the universe so in that way I can, I can certainly see it going on and I can see it spreading to other places and becoming maybe more prevalent, more prominent and involving more people, which I can only see it being a positive thing.

Well, there's been a couple of occasions when... we thought we were going to be caught, like lights scanning over the fields, people out trying to catch people,or people's cars stopping at the edge of the field or hearing noises but I think, our kind of view point on the whole thing is to, we believe we have a sort of a field of protection around us, we ask for protection before we start and... I think it's good to hold on to that while you're making and you can usually find that, as with many things in life, if you sort of trying to view it positively from the outset you usually find it manifests positively, you know, you smile at the world and the world smiles back; because you can spend all night cowering down below the corn, shivering and frightened because you think you're going to be caught but I think the best thing is to get your head down and get on with it and have faith that you're doing the right thing and that'll be OK, you know.

We do an invocation before we start, we ask for certain things, we ask, wish to be protected, help in being guided, you know, that everything goes smoothly, you know, and also we ask that hopefully people may benefit in some way, shape or form, you know, for me maybe you can be more specific about that how you hope it might benefit people and how it might positively enhance people's lives and lo and behold, a lot of the time after the event it manifests forward then sure enough, maybe you've asked for a healing and it heals someone or... if you have asked for it to open people's eyes to a particular thing maybe that happens and, you know, and there's been plenty of instances where what we've asked for is what you have got, but as with all forms of magic, I suppose you could say,

and you have to be careful what you ask for because sometimes you get it.

I think the fundamental difference between the way that we... we make crop circles and the way that other groups maybe approach the situation is that we are trying to keep an air of respect for the temple that we are about to build, for the sacred space that we're just about to be produced and hopefully the air and the magic that it'll hopefully bring into people's lives, and we do that by, we do invocations before we start, we... we say "hello" to the spirit whoever may be important to us or whoever, energy which may be significant towards us and... there's an overwhelming respect or air of respect for the environment in which we're working or what we're doing and at no point is it chilidish or foppishness or... I've never tried to make it negative, you know, we're trying to keep it purely positive and open minded while we are making it as well because we believe that the energy that we have while we are making the circle carries on fundamentally to the people that then enter that same space.

That's the fundamental difference between the way that we do it and the way I understand that other groups may approach it; it is very important to us. It... It involves our entire attitude about the way that we view life and the universe, it comes through hopefully in the way that we, not only in the art form itself, but also in the way that we go about making a circle in a very... reverent and... shamanic, maybe, way.

For I definitely believe there seems to be some other form of intelligence, there seems to be interacting with circlemakers and believers alike, you know, at some level there are certainly reams of evidence of the Balls of Light, of the amount of people that have seen them, that I've known, I've met, I've talked to, I have heard talk and the amount of films, came out with people that I trust and know and like... There definitely seems to be a presence of some description, that seems to be pushing the crop circle phenomenon

forward, more than just how the people are moving it and changing it.

Without being too specific, I've had one occasion where I was making a circle at night, without anybody really knowing that I was out there and during our invocation I asked, I thou... I mean, I've always liked to ask for something before I make a circle and on this particular occasion I thought I could help a farmer hopefully and I was far too general and I said "can... can great spirit, can you make this place more fertile" and I conceived my daughter about two, three days later, so... be careful what you ask for because you might just get it.

I have seen Balls Of Light, I've seen them while I've been making the crop circles and also while I've just been staying out over night in the area and there's something that's almost taken for granted by a lot of the people round here and once you start spending time round there you can't help but understand they are... they're here, you know, they're in the area, you know. I'd really like to find out where this consciousness comes from, where maybe it's external, maybe it's internal, maybe it's a bit of both, maybe the two are the same, but there's definitely something, in the fact that these places are magic, coincidences happen more in these areas, they're much more prevalent, much more... much stronger, much more life changing almost well no they're not life changing they fundamentally change the way that people view things and this seems more than just... more than just a coincidence, this is synchronous, this is greater, this is almost divine and there seems to be a consciousness, a motivating consciousness behind this, that seems to be driving things forward, driving us to some eventual conclusion.

What that eventual conclusion is, I don't know, maybe it's that everything is interconnected, maybe that we're not separate entities, maybe on some level we're all we're all part of the same thing, you know, and what a wonderful message for a consciousness to maybe,

to put forward to us, what greater message is there? Maybe it's the greater lesson that we have to learn in this very troubled time.

3. Interview with Rod Dickinson

I make circles because I'm an artist and I regard circlemaking as part of my artwork. Circle... there's a tradition of circlemaking stretching back 20 years, I'm... I'm a part of that tradition, and there are certain things that making a crop circle demands and that does involve quite a lot of work, planning and such like so... if people regard that as trouble then I guess that's what it is, but to me it's just part of the activity of being an artist, of making art and maybe a slightly odd, peculiar way I suppose.

Well, making circles is not a joke, I... I mean it is funny sometimes but generally it's not a joke. I mean I kind of regard making circles is actually quite a serious activity I mean it occupies a lot of my time, a lot of my thoughts, and... I mean I think that circles function in quite a profound way for a lot of people. Crop circle making is a kind of selfish act in a way, when you make a circle although you're the author of it because it's important that circles are not seen to have human authors you lose control of it and therefore people I suppose can do what they like with it. I mean I actually think the

photographers that take such stunning photographs deserve every penny they get from the photographs and I'm also particularly pleased when farmers make money from... by charging people to enter the formation.

I don't particularly crave publicity for myself but I do want my work to be seen in a public context and interact in a public way with large numbers of people and hopefully often in quite a profound way as well.

I've never pulled the wool over anyone's eyes actually and I've got no really any interest in doing that. Making circles is really like any other aspect of my art making. There's nothing suspect about it. I'm simply going out into the field and laying down a design and I suppose with that design goes a question to people: what does this mean for you, why is it there and how is it there. People are free to answer those questions how they will.

I'm really interested in what other people believe and part of the reason for making circles I suppose is... it is like some kind of... curious amalgam of one's going out and making a circle and... and feeling that you've met some kind of challenge, some kind of technical challenge and at the same time then watching how other people absorb your creations and interpret it and speculate, analyze it, whatever... So, in that sense, what people believe is fundamental to the practice of making circles but not in a sense of mocking the belief, in fact you're actually interacting, engaging the beliefs, there is a totally symbiotic relationship with the circlemakers and the people that research them, the crop circle researchers, UFO researchers, whatever they like to call themselves.

Actually the risk of being caught and prosecuted is very low, the fields of southern England are numerous and very large and it's almost impossible to be detected whilst you're making a circle. On one occasion I was lost for two hours in a field trying to find two other people in the field who I knew were there but... despite knowing they

were there it still took me over two hours to find them. Now imagine if you went into a field and you didn't really know whether there was anyone there, the chances of finding anyone are so remote and so the chances of being discovered are so remote, really.

I'm not attacking a belief system, but I certainly am interacting with it and engaging with it, I mean I'm actually myself very attractive to an unorthodox I suppose what other people call an unorthodox or alternative beliefs systems. And as an artist it's... part of my art work is engaging with them in a variety of different ways and crop circles is just one. So in that sense it's important but it's not an unorthodox hoaxed beliefs system like this church or some other established (...) hoaxed belief system, whether they'd be overtly very religious or other ways.

I mean, I can't... don't think any circlemaker could merely just find what they do in the field, it's not possible, obviously... it's criminal and in that respect it's hard to take any moral position against it and I don't seek to do that, but I do hope... I do bring, bring some kind of experience to people who visit them that they think is worthwhile, they don't feel that this has not been waste of time and they've got some kind of pleasure from it and some sort of enjoyment from it, or maybe some even more profound on that.

My activities yet sometimes cause trouble from believers, I think really because they say a a climate of misunderstanding between circlemakers and researchers. Circlemakers are generally rather caricatured in the minds of... researchers and as a consequences there's a certain amount of vitriol directed against circlemakers not just myself, other circlemakers as well. As I say I think its really a result of a misunderstanding.

I've had a couple of phone calls and some letters; I wouldn't call them a campaign of hatred or paranoia in any sense. I think... that they are just cases of misunderstanding, but there is a curious paradox where circles researchers love the creations that we artists

make but on the other hand hate the idea that they are made by the a... by artists and not by some sort of paranormal entity. So, as a consequence, they're stuck somewhere in between these two things.

Yeah the first time, actually one of the first times that I was visiting the circle, I actually took a photograph which I suppose what could be called a photographic anomaly appeared on; I surely offer that time I started making circles and that very day when I went out and took that photograph was a kind of weird conversion for me because it was also the first day when I really twigged that the circles probably were made by people, but at the same time I experienced something which was seen genuinely and still seems genuinely anomalous. And that's really set the tone for my circlemaking activity since then, and which was 1991, since that time I have had probably half a dozen sightings, some of them have been photographic, mostly have not been, mostly have been whilst I've been constructing a circle, and as a consequence of that have been witnessed by numbers of people including on two occasions journalists, and these were mainly flashes of light, a ball of light and a column of light as well, recently that we were witness. And they've inspired me to go on and do other things as well, I have also... I made another series of art work based on those experiences.

Absolutely bizarre coincidences happen all of the time. I can remember... early, my early circlemaking days in the early 90's when I made a formation and overnight another circle was added to it, which was actually on the diagram that I had with me, but we decided not to put that circle on the formation, I came back the next morning and the circle was there; I don't know what to make of that at the time and I guess I still don't really.

Well, it's clearly not a new art form because Doug Bower has been making circles for 20 years, and in my opinion actually he has done something absolutely remarkable and... kind of deserves the credit which I'm sure he'll never should get for it unfortunately. But in addition to that I think that there is a tradition in the paranormal of

intervention, creative intervention by individuals. It probably stretches back for centuries. I think you can see that in... many many different forms from UFO photographs, to perhaps going right back even to the Turin Shroud, to séances of spiritualists in the 19th century; it is a tradition of some forms of creative intervention which verges on deception sometimes and crop circles are just another manifestation of the same thing, I think.

Making a formation yeah can be very, very exciting I suppose, I mean certainly you do get a kind of adrenaline hit from it, but the adrenaline hit is... I think due to being in a very, very extreme situation which also is quite alien in many ways. You eye... the pupils dilate massively so... your whole experience, visual experience and your senses, your visual senses, are completely thrown... it's almost like seeing in kind of infrared or negative or something it's impossible to judge distances and shadows appear where they shouldn't be, thing move on the corner of your eyes, your eyes play all kinds of tricks with you; and at the same time you've got this technical challenge of putting something in the field in an incredibly short amount of time; that is really pushing what's humanly possible to do, added to which you're trying, your damnest not to be caught anyway. So, yeah, it can be pretty exciting, pretty hairy.

I have no idea rationally what crop circles are for, and... I'm making'em because I'm an artist and I see them functioning, as art pieces in a very public way I think all other people think there may be other things and for other things, so beyond that I can't really say.

Well there is a number of things in designing of the circles that are interesting, and I think characterized formations or the recent formations anyway of the last few years that they contain often, we design them so, they contain very specific geometric relationships which are usually related to the division of a circle by 2,3,4,5 or 6 parts. And as a result of that the geometric ratios they contain develop into geometric patterns from those basic divisions and the other thing as well about the design is that they often, we often try

and make them so that they somehow resonate with images that are found in nature, or images that are found at least in notions about nature. So, I mean that would include things like spirals or other geometric shapes that you might find in a natural setting.

Yeah, I mean the sources for some of the designs for circles is nature itself, many of the circles of the last few years are nature or sometimes on a micro... microscopic level, often on a macro level as well, have provided the inspiration for the symbolism of the circles as well as various geometric relationships that are embodied in those natural symbols.

Etchilhampton, Wiltshire, 25 July 2004. Copyright: Andrea Feliziani.

4. Interview with Mr G.

We started crop circles, that's my partner and I, pretty much when the season was drawing to a close and I remember being in the Milk Hill masterpiece and wonderful fractal and I met Colin Andrews and started to have a chat and there was this absolutely knowing with certainty that there was a man made phenomenon by and large but when I discovered with certainty that it was a man made phenomenon then the next step was to go out and make them, and it seemed the most appropriate thing to do.

I think we just had a big stick at that time, just a big pole and we just put down lots of wheat we just put down a nice big circle. Like I said it was big circle about eighty foot to cross and the next night we came to the field and we just put circles everywhere, everywhere in the field all over the place, we probably let's say everywhere we probably about 24 circles all in that field just circles with rings and just little things and grapeshot and stuff like that, and we came back and that was our first experience [of] making crop circles.

If you ask us what... for what reason we did go into the field to make crop circles, to be entirely honest I think initially because there was a bit of a buzz, right and now people might think... this guy is a sad guy, why would you go into a field late at night to make crop circles for a buzz? But, I think we wanted to see whether we could make them and whether people would see them as the authentic article and... and then we felt over time that quite possibly something else was involved.

And what that something else is we don't really know, but we said that it's something there's a... there seemed to be some kind of intelligent response to what we were doing and some intelligent interaction and that's what has really interested us and probably it is... it is taking it to a point now that if we were to make crop circles again which we don't know if we're going to do it or not, it would... mean that we would be doing it for... one because you want to make better crop circles, bigger crop circles more elaborate, and two because we think there's something, something else is happening and I think it's something so even the man-made formations they seem to carry something with them sometimes, not always but sometimes there's something spiritual I think... happening there.

When I was 16, I remember very clearly, very clearly it's indelibly printed on my mind, we were staying at my Aunty Molly's in Reading, and I was there with my various cousins and this was late at night we were in bed, and I remember very clearly we had this most incredible experiences... to aů and they were... we had Balls Of Light, Spheres Of Light, Orbs Of Light not beams of light from the torch, but Orbs Of Light very clearly Orbs Of Light coming up here to the bedroom window illuminating the whole bedroom and then appearing to go over the roof of the house. Now at that time my Aunty Molly was so upset that she went out outside to get her cat in because she was afraid for the safety of her cat, and I remember one of my cousins was really, really excited he was jumping up and down making all this noise and going up and down the stairs. And we got to a point where... we just couldn't sleep and the kids were playing up, and

Molly threatened... my Aunty Molly threatened that if we carried on they'd be hell to pay when she came back, so I remember all that very clearly and also remember the next morning at breakfast and My Aunty had phoned the Ministry of Defense to find out if anything peculiar had been happening at... that night over that way. So all these instances has been indelibly printed on my mind yet when I asked my Molly, my auntie, about this a few years back she has no recollection of the experience and this is a bit disturbing and I was thinking "Hang on a minute but I have absolutely clear recollection of this experience in all these kind of arbitrary details and very mundane details as well accompanying there" so we had early experiences like that.

Well I became really interested in UFOs and I can remember another occasion I was in London and my mother... said she opened the door of my bedroom and she witnessed a Ball Of Light coming out of the bedroom and shooting off through the window the landing window. Another occasion she awoke in bed and she saw two very tall beings at the foot of the bed standing and they had some apparatus over their heads, she described it like that, another occasion she said she saw a star outside well it appeared to be a star outside the house, she watched it for 40 minutes and it was going up and down and left and right making the sign of the cross, as she described it.

So... we've had sort of experiences like that and during circlemaking we've also had experiences, once we were in the field and we'd actually completed the formation and so because... what people will say about circlemakers seeing things whilst they're out there, is that their eyes aren't accustomed to the night and you do start seeing unusual things initially until your eyes become accustomed but bear in mind that would actually made the circle we'd been out for... it's only 2 or 3 hours and we were coming back, the other member of our team then said something to me, and I turned around and he looked really, really afraid and he said he saw two very tall figures following in the south of the field... he's very big, he's very strong he does weight training, and he was talking about very high figures, now

yesterday I said to you I think he said 14 feet, now when you describe 14 feet is up there I mean that seems to be too high but actually at that time I do recall him saying something like that, we're talking just very, very tall I mean people tend to talk about E.Ts as these little things but so this was obviously not that kind of experience...

Now... in the same field, in the same field a year later when we were making a formation I was standing holding the pole and my brother was describing a circle and... there were these bright flashes, really intensely... bright flashes of light but gentle... I say intense but while I'm thinking back on it when you see these kind of UFO films of someone being abducted they seem to have this really intense flare and there sort of blinding affects their eyes, I'm not talking about this it was the whole field lit up... but I was... when I think back there's a gentleness to it and also... when I think back I'm certain, I feel certain that we found energized or I fou.. I know I fou... energized with each flash of that light, it was as if something was energizing us in the circle and what happened after that was really bizarre. My partner became incredibly confused, and... and... he just seemed to have lost all perspective and he just became almost kind of zombified and he was very unusual and I became very concerned for him initially because it was just like he was in a trance.

Now... he does remember that, but significantly or interestingly enough he doesn't remember the flashes of light and... I'm talking about the whole field lighting up, I'm talking about obviously intense flashes of light and so I find it funny again this kind of strange feeling of isolation well, hung on a minute so I can remember this but you don't, he can remember some of it, so it's a kind of strange it's a strange phenomenon, one ... I can't really explain actually.

There's a very real possibility that circlemakers might be responding to a call, sort of invitation from the unknown to go out into the field and to create crop circles, it's something that I believe I've experienced, and... I can remember lying on bed at home coming

home late one night after work and exhausted lying on the bed with the window open during a lovely summer evening and... there was just a magical feeling and it felt like it was coming through... the windows and the scent of the air, whenever, it was just... it was like a call of the wild, just to go back to go out into nature, and it for me was a call to make crop circles in that night, I've just contacted my partner then we went out and made the formation, I can also say that there is a feeling about that place other people feel, a... very dear friend of mine I invited her to come to the circle that we'd made and she passed the field but she was afraid to go into the field even though she knew we made the formation, she felt there was a very eerie feeling to that particular field.

The biggest formation we made there was about six hundred feet across and it's very simple, but whilst we're making it, I was standing in the middle of the... of the field holding the pole and my partner was scribing the circle, and I saw very clearly people coming into the field with dogs and with torches and going like this with the torches very clearly, I mean really clearly and I thought oh no... we've been caught and there's a feeling of dread but something else came over me and it seemed to say "no, stand your ground, carry on..." and I looked and these things had gone.

During part of the creation of that formation we both experienced the surge of energy when we made a part of that formation, we both agreed on it, we didn't know then but we since discovered that there is what remains... the remains of an old stone circle in the area I find this quite interesting and I think, I think there seemed to be... I believe... I've got no proof, but it seemed to be that we were guided to that area interacting with something in that area it's very alive and very vibrant and I don't know what is.

I think I've always been interested in mystic things, a bit of most dramatic of all experiences that I was experiencing [...] what I believe Jesus Christ so I became a Christian about two years ago, and... and I've made a circle on... since being a Christian on one occasion

and... it was a very strange day actually that night, we saw flashes and also I cut myself very badly and... but we ended up making the formation and praising the Lord actually he was making the formation, no this, it sounds incredibly irresponsible and I'm not sure about it and as a Christian I also love the Earth, I've a deep love of nature and... and I think the two can come together, you know in nature, worshipping in nature as it were and... so... as a Christian actually making crop circles I'm not sure about that, I mean I did actually pray over it, it all sounds bizarre, but I actually prayed over it.

I think I'm never sure about actually going out to make crop circles, I'm never sure about it and it's not I'm not comfortable with it if I'm really comfortable with it, I'll be happy to show my face and whatever, it's a strange area, it's almost like being involved in some occult practice, as a Christian I'm not supposed to be involved in the Occult, etcetera etcetera but what I mean by occult there's just a huge area here which we don't understand and we know we are interacting with something, we don't know how much we're being used or manipulated by this something. Well there's something entirely benign I don't know, I can only say that I used to have experiences when I believe what were possibly extraterrestrial intelligences and since becoming a Christian I no longer have those experiences, but the experiences that I've had have been certainly more benign.

I was in one of my formations when the farmer came along and he wasn't very happy on that and that made me a little bit concerned obviously hang on a minute this guy ain't happy about this, but suddenly some of the major researchers had been in our formation and got a real buzz over there. Yeah I took a friend of mine in and he didn't know it was my creation and he was practising TAI CHI in it and he was balancing on one leg and he was normally quite clumsy but all of a sudden he was really inspired and he seemed to be doing amazing ů I said to him how do you feel? And he said just such as

"deep peace" and he was still very quite he had a very positive experience in that formation obviously it meant something to him.

Well, I can remember once we were in Barbury Castle and this was in an evening and... it was a pitch black night and it was a most glorious night and even... I mean we were there when it was light as well but there was a feeling in the air like a door had been opened and it was a door open it was an open invitation, it sounds bizarre but we felt and we joked about it we said you can make a formation in complete daylight here and you wouldn't get caught and there was a sensation of protection an invitation that it was now ok to go out and make a crop circle, now we didn't but as it happen that night the East Field two huge formations occurred very significant formations occurred in East Field and there maybe another one that occurred that night also I can't recall now but that was certainly one of those nights. Other nights we felt it again other nights we thought that a definite call a definite invitation and a great formation has appeared. We were going to one year... do a formation locally and we were I mean "oohing" and "aahing" whether to go to a particular hill and... we weren't sure about it but all of the sudden we got the feeling inhance from our hearts that was ok, I remember sitting in the room feeling, when feeling incredibly happy as it happens we didn't go that night but someone else went that night or something else because the next morning there was a formation around the place we were going to to actually use, actually to be honest I was really fed up because we were going... wanted to do something bigger and, but it was a really nice formation, and some people really loved that formation and got a really good feeling from it but obviously it seemed that someone else picked up on that calling or whatever it was, that impulse to do it and someone else did it and probably did a better job then we would have done, probably.

Well, there are some really nice researchers out there, there's Colin Andrews I get on well with, Colin, and... I believe Colin is a genuine researcher and he's got to a point where he's done genuine research and he's hated for it, because... also Peter Sorensen... Peter

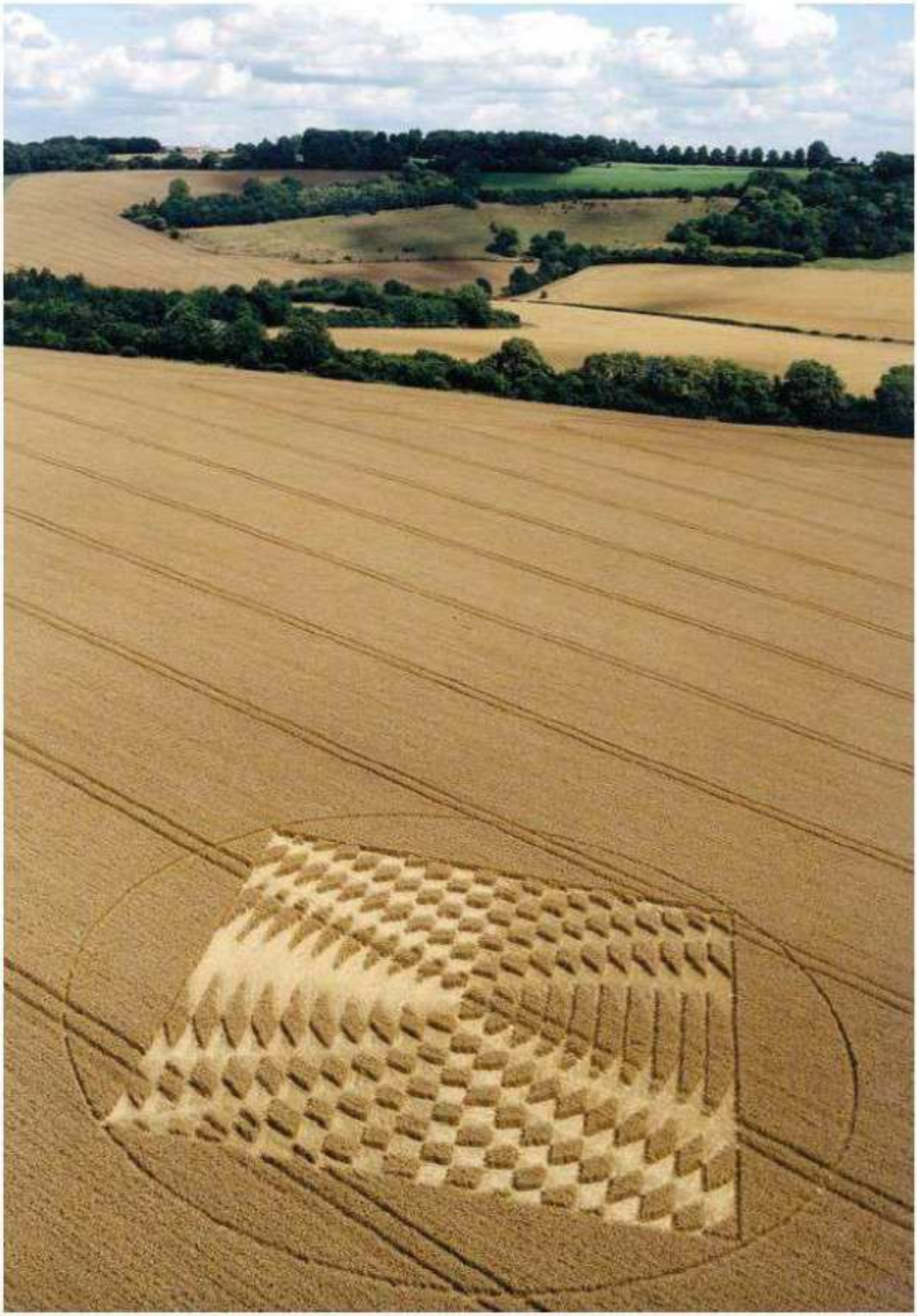
Sorensen is a very genuine researcher, absolutely genuine, first rate... first class he's done real undercover work, real detective work, and he's... met circlemakers, human circle makers who claims to make crop circles, he's got to know them, he's also legally I should know he's gonna with them to actually be a part of that now and he's actually he's spoken about that recently, so Peter is a very genuine researcher.

Colin I would say is a very genuine researcher he also has spent considerable time talking to human beings and discovering "hey look yeah, human " beings are making this and... I think that's fantastic on his part but there are some researchers out there who... they... it's almost like a little... little cult, it's almost becoming cultic and they have talked to people who're interested in the paranormal activity and who believe that circles are done by an unseen force created by an unseen force, and these researchers seemed to bend the truth for their ears, and I can remember being at one meeting, one particular lady a couple of times in fact and I've actually been appalled by the kind of arrogance in that room by ordinary folk who believe they know something that don't actually know, and also the way that certain major important things had happened that season, i.e. a human circlemakers legally making formations not even mentioned and their work wasn't shown for people to compare for themselves because I've seen formations that people like Matthew Williams has made, he did one in East Field this year a planetary formation which was so superb, it's like... I thought everyone would be... astonished, but I didn't hear that astonishment researchers it's oh no, it's not like the original, it wasn't spherical and I think hang on there's something... there's something missing there... there's... one at least must be acknowledged this is a very really good piece of artwork or whatever and so I think there's definitely missing there's a blind area and there's a real arrogance there is all I can say because it's saying that it must have to trust because human beings can possibly do that but what human beings can do it's quite amazing and I actually now believe that this attitude is actually more cynical than people who just

believe it’s human beings’ thing because it seems to say no you can’t possibly do this.

Now they don’t... perhaps they have never tried or perhaps they just can’t confess that its possible because perhaps they’re making I don’t know they’re maybe making money out of it and I know some of them are making money out I know some circlemakers who aren’t making any money out of it. But I know some researchers are making plenty [of] money out of it, I think money is neutral... well I’m very happy for and everyone making money out of it for circlemakers, I like everyone to make money out including the farmers then everyone’s happy... then everyone’s happy and that at the end of the day that’s what really counts for me because it’s just a wonderful experience to go out into a circle and you find that when you go out and meet people in circles it’s... there’s a comraderie and that only vanishes when we talk and people talking being expert and being, in a sense, condescending or using it as a platform to broadcast their own particular philosophy and many people doing this became like gurus and they don’t actually like gurus they don’t actually know anything but profess to know and that is a bit of corruption of circlem... of the art of circlemaking, of the circles phenomenon I think in a sense.

The word I’ve got at right through prophets, the prophet as a human being flesh and bone and God is speaking to that flesh and bone through spiritualist flesh and bone and possible messages from the beyond so there needs to be that physical presence when Jesus he came he was physically present to transmit this energy to conduct this experiment whatever it was or to be a part of this great sacrifice. So... there seems to be a necessity, a physical necessity so human beings are perhaps channels or conduits, so this is a life specialness isn’t it, you know the circlemakers might feel special because they’re making the formations, the researchers might feel special because they’re discovering the formations but really perhaps no one is special, we’re just part of a movement perhaps...



Aldbourne, Swindon, Wiltshire, 24 July 2005. Copyright: Andrea Feliziani.

5. Interview with Will Russell

It's given me the opportunity to interact with an experience something can only describe as been supernatural, paranormal which, at the best of times is very exiting and exhilarating and perhaps at the worst of times, is quite unnerving and even frightening.

There's a certain artistic pride which comes into it, which I'll admit I enjoy when someone praises my work or work I have been involved with, but I don't really see it functions particularly well inside the art arena, which has a problematic relationship with the public and works far better outside the art arena, when people know that what they are looking at, is a crop circle and not something that is hanging on a gallery. I don't really see is that much trouble. It is very addictive doing it, especially if you are experiencing things which are beyond conventional science or science as we know it.

If... the believers want to believe, whatever their beliefs may be, I am quite happy to let them believe that and I am not going to come out and say that I have made this particular formation, it is not my interest to claim authorship, I let people freely believe what they want

to. It doesn't so much anger me unless the product which they are selling is of a very poor quality and I am quite happy to go out and buy that product if they are of an adept standard.

I don't crave publicity, but I think it's an integral part of the crop circle phenomena. Not perhaps the publicity of the people behind it, but the publicity of the circles themselves, it's very important. I don't feel that I am pulling the wool over anyone's eye because I'm allowing them to have a free decision about their beliefs, they can go out into a field and experience something which is very personal to them and something which perhaps only they can experience in that particular circle and will be very special to them. It is not in my interest to say I made that circle, it didn't happen because quite obviously to them it did, and very often something strange will have occurred whilst creating the circle. People are quite free to believe what they want to, so long as they don't impose their own beliefs upon me, allow me to base my opinion and beliefs on what I've experienced.

We're not going to get of course prosecuted, it's near enough impossible to task unless you're going to mount 24 hours surveillance on every field in the South of England and for the period that the crops grow, which simply isn't unfeasible. I am not directly involved in any kind of Religion. So, saying to people believing in Christianity that there simply isn't a God or Jesus never existed, it isn't really in my particular interest. I mean, I'm only involved in circles and not in Christianity and circles aren't strictly a religion or ever much the believers might like to think it is.

Exactly the same amount of rights as anyone who researches the circles has to market a product which ultimately is on the backbone of something I've made and exactly the same amount of the rights of farmers has to charge 2 pound entry fee to his field. They kind of need us, we need them, without the publicists of a product it makes it well rends it 50% useless really, and it is something which needs to interact with the media, with the public and without that it goes unseen, it's just for me to know about and the people I've made the

circle with. No believers really know but I play quite a bigger part as I do in circlemaking, until now perhaps.

Absolutely it's one of the main reasons why I make circles is perhaps not every circle that you go out and make has some kind of paranormal experience but at least one every year for the last 5 years and ranging from, may be a huge Ball Of Light with a very low almost inaudible humming noise with it that appears to cast no light whatsoever or a.... column of light shooting out from the sky accompanied by a kind of metallic smell like if you had held coins in your hand and or small Balls Of Light doing seemingly impossible things as well as perhaps... events, which occur afterwards like camera battery drains on your return. That perhaps a circle which I thought I've made up appears somewhere else particularly relevant and for instance on some... some secret documents somewhere or something like that.

If I had made a circle and I think that I purely and simply come out with that design from my own consciousness that maybe someone else has drawn out that sign or symbol and... or had some direct relevance to them and their experience that symbol somewhere else.

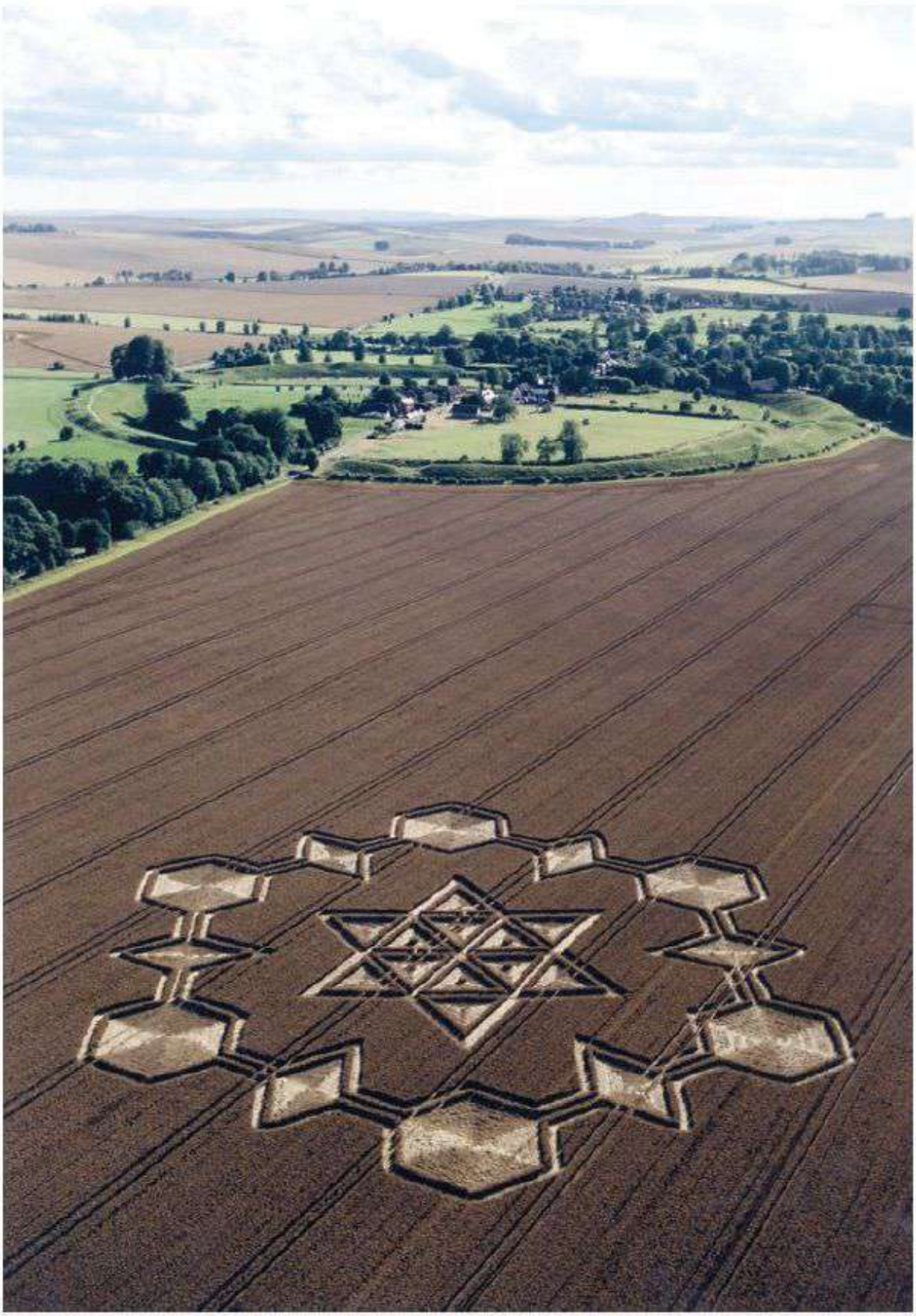
It seems now that there has been quite a huge shift in perception from the believers that whilst formally they're quite happy to believe that the circles were made by some supernatural force and... that now they are more than happy to believe that the circles can be made by humans but it doesn't matter, the shapes they are appearing in the field are giving inspiration and... allowing for people to enjoy perhaps the countryside and the phenomena, whereas beforehand if you mention the word "hoax" you get a scornful look and perhaps be targeted for some aggressive behavior, that doesn't really seem to be too much of priority now.

No because in many ways I don't think... think that the whole phenomenon is defunct and as I've said that many kind of instances of something paranormal happening and... which when it makes you

feel quite unnerved because you don’t know precisely what role you play in the whole phenomena. It can be a little confusing at times. I guess I’m fairly confused what role I play. I would like to think that there is something bigger and greater out there as I think, perhaps everyone would.

I think the whole thing resides in "land art" ultimately has an authorship behind it. When crop circles have no authorship behind them, they have a lot of more powerful, they are crop circles not art which I find particularly interesting; if they become art or Land Art they loose a lot of their mystique, their paranormal powers people are less likely to believe in something happening and I think that is very important, that if you are wanting to experience something you have to go into it with an open mind and not a closed mind, the people will come and I wouldn’t use perhaps a stronger word is worship but they’ll bring all manner of beliefs, be that dowsing or meditation or just simply wanting to experience a particular change in atmosphere or energy and that is I think perhaps one of the bigger successes of crop circles, they can bring together a lot of people who want to experience these things and a lot of enjoyment when people do experience these things. Be it that is not collectively or cannot be proven and is perhaps a facet of the whole phenomena which is very integral to it.

Well consider myself an architect of temporary sacred sites depending on what people experience when they’re in that temporary temple. If or they do experience something then on I’m very happy for them that they have experienced in something and it could be seen then as a temporary sacred sites.



Avebury Henge, Avebury, Wiltshire, 24 July 2005. Copyright: Andrea Feliziani.

6. Interview with Rob Irving

Well, the word hoaxes is a bit of a misnomer. "Hoax" implies somebody wanting to go out and deceive to other people, deceive other people, and I don't think that it's... I think is misused in that context. The thing is we've set up this black and white thing where is it a hoax or is it genuine and if it's genuine then implies it's some sort of the unknown force, aliens, or some aspect of the invisible world and if it is not that then its hoaxed, I think it's a completely wrong language to use. So I don't think I've never really hoaxed, I've made crop circles but I never really hoaxed.

Originally my interest was in finding out who was making circles, I decided that it was most probably people. So in the process of finding out who it was it involved hanging around in a lot of wheat fields and it seemed sensible at that time to try oneself so I and others did.

Once that stage had been gotten over, it became quite compulsive it became more more to do with the creative compulsion. They require trouble, the size and designs you choose to make require trouble,

they take a lot of effort and that's the effort that means to be put into it.

In a very arbitrary sense... in a very arbitrary way, I tend to regard the products of people who don't go to the same trouble as hoaxers I tend to be dismissive of that work, but the people who do go to that effort and take that trouble to me the the product they come up with is a genuine product, in the same way as a painting would be, if you... If somebody have gone to a lot of trouble creating a painting there'll be no question of its authenticity you have some sort of respect for it and as the language we are using it's genuine or fake or hoax than to me that's genuine and there's no question of it.

it's... a better answer would be, well, conscientiousness that's why we go to all that trouble, because it requires trouble, because it inspires people, it... because its the nature of creativity, it requires to be done, in the same way as anybody, anybody creating anything it's required to be done and some people are prepared to do it and some people perhaps aren't.

Well ask me again it, I insist... (laughs)

[OK, why do you go to so much trouble?]

Because it's required to be done! (laughs) of course! I think the world would be a better place if the circlemakers made a bit of dosh too, but there again they do and, you know, he doesn't know... it doesn't anger me at all.

Well, the thing is... there's no joke being played, it's... as far as we're concerned we're creating new aspects of the same thing, yes, in the same way as you... I mean somebody said once that that an artist paints the same painting over and over again, writes the same book over and over again and sure you're you're making circles over and over again but you're not really making the same designs, you know, it just needs to be done every year.

[Why?]

Well, or I guess it doesn't really [matter], but some might think it does, because it's good that it does, it's beneficial that it does to admires the landscape.

Ask me why the sky is blue Grant,

[Why is the sky blue Robert?]

I have no idea! Because it's required, it's required that it's blue! But, am I perpetuating a myth? Yes but it is not my myth, it's other people's myth so so to me I'm perpetuating something else, you know, I mean you might ask is it important that there's a mystery, that would be a very interesting question to ask, and yes, it is important because of the values and the meanings people place on these things, they decide that it is rubbish if it's man made, and it's brilliant if it's genuine, so mystery does play a fairly crucial element in how it's value. I'd hate to live in a world where there's no mystery, I would suggest that there was some somewhere and someone said there wasn't, phantom hitchhiking, you know, people who are seen on the side of the road and get later reported this phantom MIB (Man In Black) visitations.

I mean, you know, I've been described as that, you know, purely from existing somewhere, you know, how you're seen... I've been sitting at home watching tele in London and have been seen in Wiltshire, as this somehow paranormal phenomenon, so there is this tendency of people to contribute to other people's expectations which is a side of the paranormal which needs to be looked at I think.

Do I have write and have credits for my writing? Yes of course, and do I insist upon a credit for my photographs? Of course, but do I crave publicity? No, I don't think so.

I would say no, circlemakers tend to shy away from publicity, being a retired circlemaker I feel immune from any such question. I mean I

have no control over whether people pull the wool all over their eyes or not, I certainly wouldn't.

[Do you enjoy seeing them do it?]

I don't relate to the question.

[Do you enjoy seeing than do it ? They obviously do.]

I'm used to seeing them than do it. No, I don't enjoy... I found it kind of boring a lot of the time, I don't really... I can't say that I enjoy, I mean, we live in a world where, you know, internet access and everything and I I'm on the internet and I read about this and that and sometimes it involves me and I don't go away thinking "oh I've enjoyed that" I kind of think the word "Sheesh" a lot, an internet term thinking "God!", you know, so no, I don't enjoy it I tend to sort of being quite disgusted by it a lot.

Because, it's not... the phenomenon is owned by anybody, so I can't control what other people... what meanings and values other people place on it, so just because people say that it's made by aliens it's not my fault they think it's made by aliens, you know, so I'm not controlling it, I'm... all I'm doing is giving people the opportunity to think... I guess they think what they like, you know.

[What's the risk of being prosecuted and being caught, is it worth it?]

Well it wasn't... it was never really a risk to be frank, I mean there was never really a risk of being caught, I mean there are a lot of threats made but but there was never any risk I mean obviously... if... play percentages, you didn't put yourself in a risk situation. If you saw somebody walking into a field you make off the other way, I mean there's no risk about it.

You can't keep pressing home the same point I mean that last maybe a month or two months and you realize that people are going to actually... that the key to all this is that people aren't actually

looking for answers, they're not interested in answers and once you realize that they're interested in a sort of social habit, you know, if there was an answer then they wouldn't be... there would be no reason to come to the Barge [The Barge Inn] every year, you know. So... once you got the gist of that then it become something else, and you wallow around for a little while and it becomes art, you think art, Charles Saatchi's into this stuff, yes! That's a good way I've looking at it, it's art, and I wholeheartedly believe now but it is. Art, it fits the complete criteria of art, in the sense that art is supposed to fill people with experience, and people are supposed to get that experience of what they're observing or looking at or being in and... yes, it fits that criteria perfectly, so yes one becomes an artist and it's brilliant.

I have absolutely no right or I'll give you another answer I've every right in the world, I haven't decided which one yet... Besides threatening mail, the physical threats, the abuse... no, no... not much trouble, the damage to cars, the hassles, you know, they always seem to phone up while I'm watching a good football match, apart from that no trouble at all.

The most common which I've also experienced are bright flashes of light in a direct proximity of your activities, the other ones have been mental, more mental, I thought... I've made a circle and I made an avenue and I'm down at the bottom of the avenue and I... as I'm making my way up back up the avenue I think what if is a devil sitting in the circle, you know, and I've started doing in my head a little bit and I get there and there isn't any reason, so I realize oh... maybe that's why people see devils, you know, God, oh... uh... that's something that you need to think about. But apart from that no... occasional meteorological anomalies I would say bright flashes are a bit of a mystery, that's all they're talked about by circlemakers, in pubs, over beer...

To make a circle? [A] couple of people, [a] Large pictogram, 4 hundred footer, one and a half hours.

[And do you feel you can do this in complete darkness with no moon?]

Full moon makes it very, very difficult, you pull something off but it is too bright,

[people would see you so...]

Yeah people would see me.

[So half moon is or quarter moon is better]

Yeah all normal, sure yeah, because people... eyes adjust to the light, everyone who lives in the country knows this.

[So a lot of people say "Oh they couldn't possibly do this in the five hours of darkness and..."]

Well a lot of people say a lot of things but they... you know, maybe the objects of this exercise to me initially was to try it and once I've tried it we've found a lot of the statements were not true.

[And then how do you get a group of people that can follow orders and do these things with such precision without any mistakes]

Two people, following orders.

[So you don't... you wouldn't get a whole group of people be too hard to control]

We, I mean, you... I would say lately in the last year or so you've had more than two people working on, you know, and... I would say often it goes wrong, yeah, I mean there was a very large formation in this vicinity last year, very large, probably the largest one you can think of, which went wrong, and if you look at it from the purely aesthetic point of view it didn't go wrong, if you look at the photograph, if you... look at it from the position of being there you can see how it kind of

did go wrong. Most of these jobs are done by two in the morning and people are at Membury service station [on the M4] by three [a.m.].

There's an obvious sense of denial somewhere and I get accused of having a strong sense of denial and that explains skepticism, that skepticism is denial, because these things are true. And from my point of view the denial is on the other side, I mean evidence has been put for bla bla bla of this that and the other, and still seven years later you get people saying "well, people couldn't do this because..." and to me that's a sense of denial. To me it's all about... is this weird twisted kind of wrangle thing about human potential, how I say "yes, people can do this, people can go out and make and create this thing" and there's a big... ok, they go off in secret and it's dark and there's a big mystery about it and that to me is human potential.

But there's this other side which says that's denial saying that, human potential is about communicating with these things and believing in this kind of invisible world, that no one can kind of quite put a finger on, and there's the... there's the line, you know, who's right, I think it's very interesting the line, I love looking at the line...

[You love walking in...]

Well I come here and apparently I do walk in but to me I'm just coming here to have a drink, but here I am, you know.

[Do you feel like being part of the phenomenon is actually help perpetrate it?]

Yeah, I kept it going a few years during a sticky period,

[But I mean you...]

1991... between 1991-1994, we kind of myself and a few others, kept it going when it was sly there was a feeling during 1992-1993 that the thing needed to be kept going after the debacle of Doug & Dave,

and it was a good phenomenon and it needed... it needed to be continued and there was that... a bit of that feeling, and looking back I think that's probably true.

[So do you do feel that some parts of it are genuine, that they come from somewhere we cannot explain?]

I think that... if if you assume for a moment that they're all... doesn't matter how they get there, if they're all... say they're all man made, all of them, the fact that people are experiencing things and being healed and feeling good that to me is very, very interesting, and needs... needs investigation. Science isn't looking at that. So even at this basic level if you strip the phenomenon down to nothing, you know, to complete noneness, you know no kind of paranormal reasons that things are appearing, the fact that people are interacting with them in the way that they do, is I think very interesting and very important, and there's a lot to be learned, and I would say that that as it stands is, you know, sufficiently paranormal. So I mean you can kind of have me or not have me, you know my... and it's still paranormal I think that's quite interesting. The effect... people don't... people have got a completely wrong idea of art I think they think is... some... they view it in terms of objects but it should be viewed in terms of experience, if you look at a painting is not... a painting that's got no any value is the experience you get from it, which is the art, is the value and the meaning.

Oh they die because they have this false, completely false way of placing value on stuff, it's all coming out, isn't it, about what's fake why... you know.. it's ridiculous, art is about the experience you get from something, so therefore art could be anything in theory anything that you get an experience from, and there's nothing greater than a massive crop formation that that even as a bonus in as a kind of symbolism attached to it, you know, is in the shape of something, but even it's just a simple circle, you know, larger are the better, much as you could manage it in the night, it's gonna create... it's gonna be like a... temporary sacred site and you're gonna get more buzz then

you will from visiting Canterbury Cathedral. ... Kind of understand that people build that, the mystery is kind of important, you know the... I mean I'm not completely kind of feel philistine when it comes to understanding crop circles.

[A lot of people say you're a negative person, but if you're making something that turns out to be positive, how is that?]

Yeah, a lot of people say that because they... it suits them to say that, they... a lot of people would say what suits them, you know, and because I embody a threat to them because they're trying to place their own meaning and their own values on something and they're all trying to be important, you know, there's a lot of people in this industry, a lot of people in this pub ... be sort of ... how important they are, you know, but...

[And disproving each other?]

Yeah and disprove, arguing [it's] total rubbish, you know, I mean.

[Still going get a sense of it?]

You're asking sort of leading question, I mean, there is...

[No really... I'm just interested, I don't need to be one way of the other]

Well I'm interested in questions because the way you ask them means something and when you say to me "why is it that you felt the need?", I mean you're assuming that I did feel the need,

[am I assuming that...]

Well it's not true.

[Why is that...]

I didn't...

[if that was not true why...]

Well it's not true because I didn't feel it.

[... you have a fairly...]

Interesting question.

[A fairly public voice in the media...]

Yes, but... but my publicness isn't down to me, it's down to what other people have imposed upon me.

[I don't think that's true because I don't have any articles in the Observer, I don't have any articles in Fortean Times, I don't have any articles in UFO Reality, I don't have any articles...]

Well I have an article in one of those publications.

[Why is it that your opinions are... why do you feel the need to publish those opinions?]

Well it's not up to me whether they publish or not

[I know but you write... and send them why...]

I don't write and send anything, people ask me to write things.

[They do?]

Yes.

[Ah, ok. Fair enough.]

I mean somebody just ask me to write the potted history of crop circles, bla bla bla, for the... for a well known news stand magazine 'Now', and you ask me why they ask me, I don't know, why did they ask me?

The best story, let me think, well there's a great one of about... I don't know, the the shoot out at of the OK Wagon and Horses, I mean that was all this sort of photography of other people go..., I think the best one was when the police came round to my house demanding to know information about circlemaking, and Jim [Schnabel] and I were about to to publish a story in the Independent magazine about circlemakers and we kind of felt that, we knew who was, this was years ago, we felt that we knew who was kind of doing these jobs and that let the police came round, and I had to explain to the police that it was really a... it really needed to be sorted out journalistically rather than legally, you know, it was not a police problem, it was a journalistic... it required some understanding of... how some young people were desperately trying to communicate with aliens and that there was not really anything not any kind of rule of law about that, and that there's nothing they should be troubled with, that was a good one, and I phoned up Pewsey police station and they said "I don't want get into a philosophical argument about this, Mr Irving" So that was that...

7. Interview with Paul Randles

My first experience of, you know, going into crop circles was purely round the time the BBC were filming in Westbury, on the Westbury

White Horse, doing the study on some of the crop circles, and it just so happened that night that I was leaving my house to go into the back garden and hang some washing up and as I did I saw what I can only explain as triangular craft in the sky with three lights on each tip and sort of more sort of deep red light in the middle, and I was quite shocked and startled by this and run back in to grab my mum for her to have a witness of it, and my mum came out but she didn't catch it, it was late for her to see. And I found myself sort of lying to my mum and saying I need to fill up my car with fuel for work tomorrow, knowing that the only 24 hour garage was about sort of 8, 9 miles away towards Westbury where the BBC were filming and towards the same direction as craft was going.

So I sort of left to more or less pursue what I had seen and ended up going up on top of the "White Horse" and approaching sort of the area where the BBC were and it was then that I made sort of acquaintances with a lot of people from the crop circle background, Colin Andrews, Pat Delgado and some of my good friends today.

And it sort of happened that the next day down in the field sort of about half a mile away to their left was this large circle with three circles around it, in very similar fashion to the look of the craft and the side of this craft. And then the nigh that the actual circle appeared, the BBC cameras didn't capture it appearing it was a very sort of strange night because we all seemed to be knocked out, we all seemed to want just to all go to sleep at that point of the night we all just felt compelled to sleep, and awoke the next morning to find a circle there, and I just found it very strange 'cause we all kind of questioned each other the next day, "You know, when did we go to sleep?", and it's almost like we couldn't all remember when we went to sleep and usually you know at least one person would have a recollection... of, you know, oh yeah we decided to go to sleep at this time or something like that, but that never happened.

So it all came about when me and another sort of crop circle enthusiast we were looking out there at the crop circles appearing at

the time decided upon making an effort to make a circle firstly to see the difference between what we were seeing out there in the fields what we thought was to be genuine and what a human could do and what the sort of damage it would cause to the crop compared to some of the ones we'd seen, and also for other reasons to do with sort of supernatural events, where there was any sort of form of contact of anything that was there, or whether any energy would, you know, sort of assimilate around us as we were doing... the circle. So we wanted really as test purposes to go out and see for our own personal reasons whether that would make it, and so we sort of set about looking at sort of designs, what sort of design to make. It was less complicated in our mind we didn't want to go too complex, or make too big a circle because we were purely just on the basis of research, seeing the difference between the two.

The first circles was on the grass sort of circle over near Warminster, and it was partly just to provoke interest through the military, because it was right next to a military base and to just watch over it for a while and see whether they were taking an interest, because to us if they took an interest then there must be something going on within the military group, that was taking it seriously. There seemed to be quite a buzz around it. Especially as it was just in plain sort of long grass which is sort of what they would feed the cattle on really and they would just come and mow it down, so you know on that account you wouldn't expect there to be much of a fuss as in towards damage because, you know, it could easily all still be collected and used for that same purpose. And so we did see sort of military coming down and taking a look, taking a few photographs.

So that was quite interesting in that respect and then we moved on to a sort of a rape seed oil field, knowing that the crop was very brittle and that one was more on the purpose of seeing whether any energies would sort of accumulate around the circle we made or around us as we were making it, or whether any other abnormal events would happen and then another time where we made a couple of additions to sort of an outstanding circle that was there

already and that was sort of an experiment to see, you know, whether there was any form of contact by adding something to an existing design that could have been sort of made by some other force other than human.

We took people from the sort of circle groups and like gave'em an anonymous tip off, just so that none of them would be caught out by the circle that we'd made, because we weren't out there to try and stitch people up, it was purely for our own research purposes. We found on that one that rape seed oil very brittle and with rape seed oil you more or less would always snap it as soon as you started pressing it down to the ground and we also remember removing some of the really damaged crop and taking them with us and disposing of them. Only to find later when we saw photographs of that very circle that a lot of the rape seed oil was actually perfectly bent and wasn't snapped like it was when we saw it when we made it which was very sort of intriguing to us. Yeah, it was almost like something had come tided it up behind us, you know and it was sort of on that very occasion that, that one happened people in the local village reported seeing lights and a sort of strange glow on the hills which was opposite near the field where we were, so it was quite interesting to hear back through just local talk that happened on the same night.

We were looking at the circle photograph of it and using the pole to sort of take some aerial view shots of it and myself and my friend just felt compelled to add just two additions to that existing circle and they weren't large... portions or anything maybe only sort of 2 foot square of crop, that was actually pushed down in the process of that, but felt compelled to add this one particular circle on the actual overall design that was already there, and with that my friend said "give us a sign", you know, he said if there's something out there and it is an intelligent then give us a sign and we left the field and never thought much of it and we went back to sit in the car and I was just looking through some sort of local books of the area we were in, and looking that we were sort of more or less on one of the lines, the lay

lines in the area where we parked. And with that my friend sort of heard a sound which I tried putting down to being me with my foot on the clutch peddle and he said he didn't think it was that and so I just kept on reading the book, and then I heard the same sound again with my friend and with that the car violently shook from side to side, which to me and my friend was like at the time rather scary because nothing that could have forced the car to shake so violently, I mean if people were there you would have seen them doing it. And so I decided to sort of start the car in a rather a sort of hurried fashion and get out of there, and as we sort of flew down the lane to get away saw some lights sort of disappear behind the clouds up in the sky, and saw an owl on the fence fly off in a very sort of scared fashion.

I remembered reading sort of a lot sort of further on few years more down the line reading one of Whitley Strieber's books, and he explained how few different things in people's lives, trauma stuff, that we do as a human condition try to mask these things that happen that hurt us with other images or other circumstances to hide any hurt or any fear factor there. And Whitley Striber's dealing with different people from abduction and other things led him to believe that what with the pictures people had drawn of what they claimed to be aliens having large almond shaped eyes and a lot of the time they would relate to seeing something like an owl or some creature which did have those sort of eyes, which they could deal with. In their mind they could deal with that and be happy with that rather than what they may have seen, it's almost like a false sort of memory that we have in our mind just to protect ourselves from that fear. ... Because no one could think of what we were thinking that night and because it was quiet where we were, we discussed what we were thinking of and how we wanted to summon a circle to be made in the field and expecting it to be made in the field that we were in and my friend said well let's think of something that may be similar to the star of David or you know have six points to it something like that, and the same thing happened after we'd left doing the meditation and went back to the woods, we all remember more or less just falling asleep,

again just feeling sort of knocked out in there and couldn't remember when any of us actually did fall asleep, all we kind of remembered was kind of a flash in our faces sort of thing and just waking up the next morning.

The next day a friend of ours, a traveler, came up and told us about the circle that had appeared. Well it just so happened to be a six petaled flower, and we went down to examine it and we found that it wasn't the circle in the middle of the six petals it was actually if you lifted the crop gently six sided and in the center so it was actually, you know a hexagon and they had two trademark D and D next to it, well Doug and Dave claimed they made it, but to this day even though they said they made it, and we believe they put their hallmark on it after discovering it themselves. So to this day we believe you know that was a genuine circle that appeared and Doug and Dave who claimed to make some of them just down the road anyway may have been on their way back from making one saw this circle come and added their D&D to it, because we did find the D&D part to be all broken all the crop was snapped but looking at the petal each and petal individually the crop was actually perfectly bent, we wondered how they could honestly know what we were asking for, so had a chance in Andrew Collins book to explain that.

It doesn't really bother me what other people believe in crop circles because it comes down to I think individuality and what you believe at the end of the day, but it sort of bothers me that people do think it's all just fake you know and people were doing that because if you trace circles back as far as they went you would think why would people want to make them back then. There was no "hoo-ha" or media hysteria around the subject, nothing. And like "The Mowing Devil" picture in the book, you know, why would it get date back so far back when in times like that people would had no reason to go out and start making crop circles.

So it bothers me in that sense. It bothers me also because I feel there is a genuine phenomenon out there, but also I do like the fact

that these people who do make circles make some very fine art, and I think as an art form these people do it very well, and why not have something beautiful like that on the landscape? You know it kind of cheers people up. Just on one experience with friends where we went past one field one night near Beckhampton one minute the field was empty, within 5 minutes of saying we were going the wrong way and turning around and coming back past the same field, there was a design of 3 circles joined by lines between. Within 5 minutes... and these were large circles as well! And then to find later that after visiting them with the friends who were with me, and one friend had gone off, he just got in a funny mood that night and so he decided to leave, he said he was going to hitch back.

And then finding out that the 3 of us who went into that circle ended up with sickness and diarrhea for a couple of days, and the friend who'd left to go back never had sickness and diarrhea, which I found very strange you know that couldn't be put down to any other cause but us going into that same circle together so early just after it had formed. Yeah because it happened sort of that I went back next day and left my friend's house feeling very tired even though we'd had sleep and my friend's mother didn't want me to drive home to where I lived a few villages away she said I was welcome to stay over because I didn't look too well. I just wanted to make the journey home so I went home and I went to bed early and it was only sort of you know the next day that I sort of felt a bit more energized again and sort of upon getting up and having a shower and freshening up for the morning, I found a triangular mark on my arm which I couldn't explain and which I took a photo of and luckily for me I did because it disappeared not more than 10 minutes later and also just to find that my watch had lost about half an hour of time at the same time as well, which really does seem very strange especially from feeling so sort of low to suddenly feeling sort of so awake and so alive again.

And so the U.B.I. spawned from my mind I just woke up one day and it was just like it was in my head, "U.B.I." that very much meant "United Believers of Intelligence" from sort of UFO sightings and

stuff, it really came about that I had an open mind and my mind had opened up enough and I had seen things that no longer could I just put down to being classic ice crystals in the sky reflecting light and things like that. So U.B.I. spawned from that but U.B.I. wasn't really about just two individuals it was about people coming together and to share in the experience and look at different sort of sides of it, not just the crop circles but spirituality, sort of ghosts, a lot of sort of beliefs that people have, sort of the spiritual world and in the world of the paranormal and it came from there really.

I would say yes that angers that some people make money from the subject in crop circles itself, because there was a lot of people at the time out there and if it wasn't money it was kind of fame or trying to grab their slice of something which was like deemed quite magical at that time and I felt that everyone just wanted to be recognized as someone some sort of authority whereas we went around and not sort of trying to be recognized but trying to look at the whole thing openly and generally and we could see these other people just sort of jumping on the band wagon and trying to make a name for themself and of course making money from sort of crop circle conferences et cetera and I just felt it was disgusting that we went to one crop circle conference down in Glastonbury and we had a lot of information and a lot to give to the people there to talk about openly and sort of debate and it was purely on the basis that we didn't have the money that we couldn't really go in to do that and I felt sort of a bit disgusted that, that's what it had come down to was money and such sort of extortionate prices just to go into a debate.

And it just so happened that we'd met a couple of nice people out there sort of looking at the circles and they felt that we had something better to give into the debate about the actual subject and money to them was no object they did have a lot of money but they said that what was more important was the actual subject itself and they turned around and paid for myself and another member of the UBI to go in and you know get out our point of view across, so I was quite happy to do that but I just found that it was very sort of based

around tourism and just trying to make a bit of money along the way, and my approach has always been that this is something that I sort of felt was important and had more substance than just people making them as well and I didn't think it was right that people should be able to jump on the band wagon so easy.

I wouldn't say that some circlemaker was trying to pull the wool over people's eyes but I have seen people who've tried to do that purely for sort of on the basis of TV and the way that sometimes they wanted to make a mockery of the subject because if you got a subject that was at that time becoming very powerful, very in the public mind, very open and you could see in some ways the authority's trying to push that back because it is a very powerful thing having too many people with open minds out there because the state we live in, in the world where they do like to have control even though we like to think we control our lives they do have control over us. I think that something as powerful and quite moving in the supernatural and unexplained, was sort of jumped on by certain agencies to try and sort of calm public attention by using some crop circlemakers and trying to use people that thought it was genuine and trying to stitch people up at the same time.

So I'd say that some of them did it for that reason but also they probably were paid for that but generally I wouldn't say that everyone was out there just to pull the wool over everyone's eyes. I do know one group that did have a weird experience they were going out just to do it purely for those reasons, with the actual circlemakers, those teams were actually going out to sort of go about it in the wrong way, and their experience, I remember, was quite frightening for one person because as he was going round the crop and flattening it, he felt like he said that something was watching him and it took quite a bit to get this out of this person he felt that something was watching him and as he started going round and getting a little bit more nervous and this is people that wouldn't usually be nervous, they'd gone and made circles before, so you know they had no reason to

be frightened in a field they weren’t doing it all on their own there was a group of them.

The Ridgeway, Avebury, Wiltshire, 31 July 2005. Copyright: Andrea Feliziani.

8. Interview with Matthew Williams

I went out and made some circles in quite simple affairs in the first instances and researchers deemed these circles to be genuinely paranormal and what was interesting to me is that some people experienced weird paranormal effects in the circle that I created, now if you're asking me you know why you created circles, I suppose initially to test the researchers, but because of my finding that people were having paranormal experiences in the circles we had created it obviously opened up a completely new avenue of why I would want to make circles Why I think the lines actually get blurred and maybe these researchers could have quite reasonably believed my circles to be paranormal is because many witnesses many many people who actually went into the formations actually experienced paranormal events and these were not just researchers.

So... my testing to find out whether researchers could tell the difference actually produced a whole different response than I expected. And of course when you realise that you can create something in the people are going to have a sort of a response in the circles, I think it opens up a question in your mind as to how far you can go and just how far the experiences that people have will go in

these circles, so I wanted to push the bounds of what I was creating and also to see the reactions of people went in afterwards to find out what they thought of the circles too.

What you have to get over is the understanding that, you know, first humans are making the circles, secondly you have to understand that circles are having an effect and that people are experiencing strange things and then the concept of whether or not this is hoaxing or whether people are trying to be fooled I think it goes out of the window. Once you realise that crop circles are real, no matter whether I make them or UFO makes them or maybe an alien makes them; you know, they all attract paranormal phenomena and it doesn't matter who's making the crop circle, is a very large magical symbol like a talisman. It has a power and energy which goes beyond beyond just the simple form and shape.

I don't like the word hoaxing, hoaxing implies an intent to fool, to sort of ridicule, and that's what not crop circles are about, I don't go out a daily basis, you know, to make crop circles that are going to fool people, I go out to make crop circles that are going to give people experiences, and make them make them happier in their lives, make them understand themselves and make them look inwards but it's about a spiritual endeavor this is why people keep coming back because there's something good, something beneficial which brings the circlemakers back time after time because they're having their own experiences and they're helping other people having experiences.

I think if this was a joke, you would have seen the circlemakers give up years ago, there must be something, which obviously draws people back, to keep on making these circles and this is I think the fundamental question is why do people make circles I'm not totally angry because people make money from crop circles, obviously there is a need for information to be passed out into the community about what crop circles are, about the location, photographs, videos, these sorts of things... people personal experiences, people

researching into the paranormal, all these things need to be explored you can’t do that without money from somewhere, so... the making of money from crop circles isn’t so much of a problem, what I do have a problem with, are the researchers that I believe are not doing their utmost to find out what’s going on or maybe have their own personal bias in saying that these things can’t be created by humans when they when they haven’t even spoken to the humans that are creating them, which I think is a bit of a failing on some of the researchers part.

What I don’t like is the "cloak and dagger" that seems to go on in the crop circles community were by, you know, we are portrayed as the bad guys that cannot be approached and then statements are made about how we can’t be making these crop circles, you know, that to me, making money from that type of argument is rather sad I think, you know. This isn’t really about me this is about everyone involved in crop circles, right from the researchers to the public who hear about the crop circles through the newspapers or television programs or because they travel along the roads where the crop circles appear and they decide to go in and have a look. It’s about everyone who is involved all over the world who has an interest.

What I’m trying to do is just to be as honest as I can can about my position in crop circles and my arrest, which was unfortunate, did have the effect of thrusting me into the media limelight as being a circlemaker but I can only stress that it was not my own intent to be arrested for making crop circles; that was the doing of crop circles researchers unfortunately who didn’t like the fact that I was out trying to show them that humans can make circles.

I and the rest of my team have gone out, made a circle in a field and found out that another team was making another circle in the same field on the same night and there was a specific design element in our crop circle which actually had something to do with the other crop circle and it was actually something in ours was pointing toward something in the other circle and I think this was a very good

coincidence that two sets of teams would be out the same night, in the same location and would be doing a similar designs which have a connection between each other and is this just coincidence or are the circlemakers getting the urge to go to a particular field on a particular night and do a particular design. And this is the type of the things I find fascinating you know, when you're making the circles when you have these coincidences much of which you cannot speak about openly because you reveal the details of the circle to people who, sort of, might not be ready to take that sort of information, you know, it has to be held secretly so that people can benefit most from the circle.

Another coincidence that took place, I did a circle design and we went out to made this circle and on within a similar timeframe but in a couple of days somebody else but in a different part of the country, actually North Yorkshire infact, created a circle and this circle was very similar to my design. Now I say that the chances that the designs being so similar are astronomical, so what we got here is a circumstance where maybe two sets of circlemakers were picking up on the same design. Now where do we get the inspiration from this is the big question you know, am I simply drawing these things out of my own head, simply, you know, using my own sort of artistic ability or am I getting some of the ideas of a particular circle from somewhere else? Am I being given this idea pushed in a particular direction? And when you see somebody in a different part of the country do a similar design like that it makes you... makes you wander, and obviously I'm not in touch with the circlemaking team that did that, you know, it was a surprise to me, so what is the connection.

I mean if... the parallel I try to draw in this particular instance is that if I had been able to predict which such accuracy the design that somebody had done or to replicate the same design somewhere else and the chances are I could win the lottery by the same technique and it's those sort of odds that make you think that we're not dealing with coincidence, that there is something much bigger

going on. It is quite... it is quite hard to sum up, the many years of experiences I've had making crop circles but I must say that coincidences and synchronicities are definitely part of the paranormal world behind crop circles now you may get somebody who will predict your circle, you know, maybe a clairvoyant or... somebody of that nature will say that they've had a... an idea that a circle is going to appear. You may get somebody come in to the area and they've got a particular design which they've kept secret, you know, to themselves and they've been asking for this design and then that design will appear.

These are all the sort of the coincidences that I think, you know, on a personal level people secret significance in and crop circles have a lot of elements which jar memories in people and jar ideas, they act as keys, so people will look at the crop circles and what should by right just be a simple design starts to become something in which unlocks unlocks meaning for the person who is entering the circle. I've seen black figures in the crop circles, shadowy sort of figures that at night you mistake for of the team members because in the distance, you know, you can see some sort of black figures moving around you and you assume is a team member. And I've actually walked up and seen these figures just disappear in front of me and friends of mine have had this also. Not entirely disconcerting either!

Some people say that the idea behind seeing a black figure should be frightening. Well it wasn't to me, it was actually quite exhilarating, I... believe in ghosts, and I think that maybe whatever I saw might be in some sort of the spirit form and as I didn't feel any negative presence from the black figure then I'm not going to make the judgment that it must have been something bad I'm going just remain open minded as to what that was.

Other occasions, when we were making circles, I've seen Balls Of Light (BOL), and these Balls Of Light on one occasion entered the field and chased us out, stopped us making the circle and I now believe they we weren't supposed to make that circle in that field on

that night and that's what these Balls Of Light that entered the field were they to do. They were trying to do alert us and frighten us off, in that case yes I felt frightened, and the emotion told me, you know, "leave" and we did, so that was one other event.

There was a particular night when I felt a very strong overwhelming urge to create a circle and my collegues were... we were very charged about the making of this circle, but we knew that researchers were actually camped out in the field where we were going to be making the circle but something told us that it was a kind of just go ahead and do it, go ahead and make this circle, you know, you can you can get away with this, this is ok, do it, and we just did, we went to made this circle and surprisingly we were not interrupted by the researchers who were near by and I was fascinated by how this could be you know, how these researchers hadn't seen us, or hadn't heard us and how it got away with it, but I I was running on this sort of energy thing of... this is meant to be, you know, go and do this. But I sought out the researchers and I asked them, you know, what they had found in the morning when obviously that field was discovered to have a crop circle in.

These researchers told me that a fog bank had descended over the area of the field where we were working and that this fog bank had obscured the view in to where we were doing the crop circle and in the morning the fog lifted and suddenly the crop circle was in view and the researchers went in and this was very interesting to me because of the feelings that we'd had that we must go ahead and make this circle and this was very important that there was a reason behind it and go ahead but from the other perspective, you know that we may have had some form of protection in a fog bank and maybe the sound being shrouded so that we could create the crop circle and the other researchers hadn't seen us, this is fascinating to me that there may be an element of protection going on.

We have had clouds part above us when it's been raining and we thought we were going to get quite muddy and we thought we would

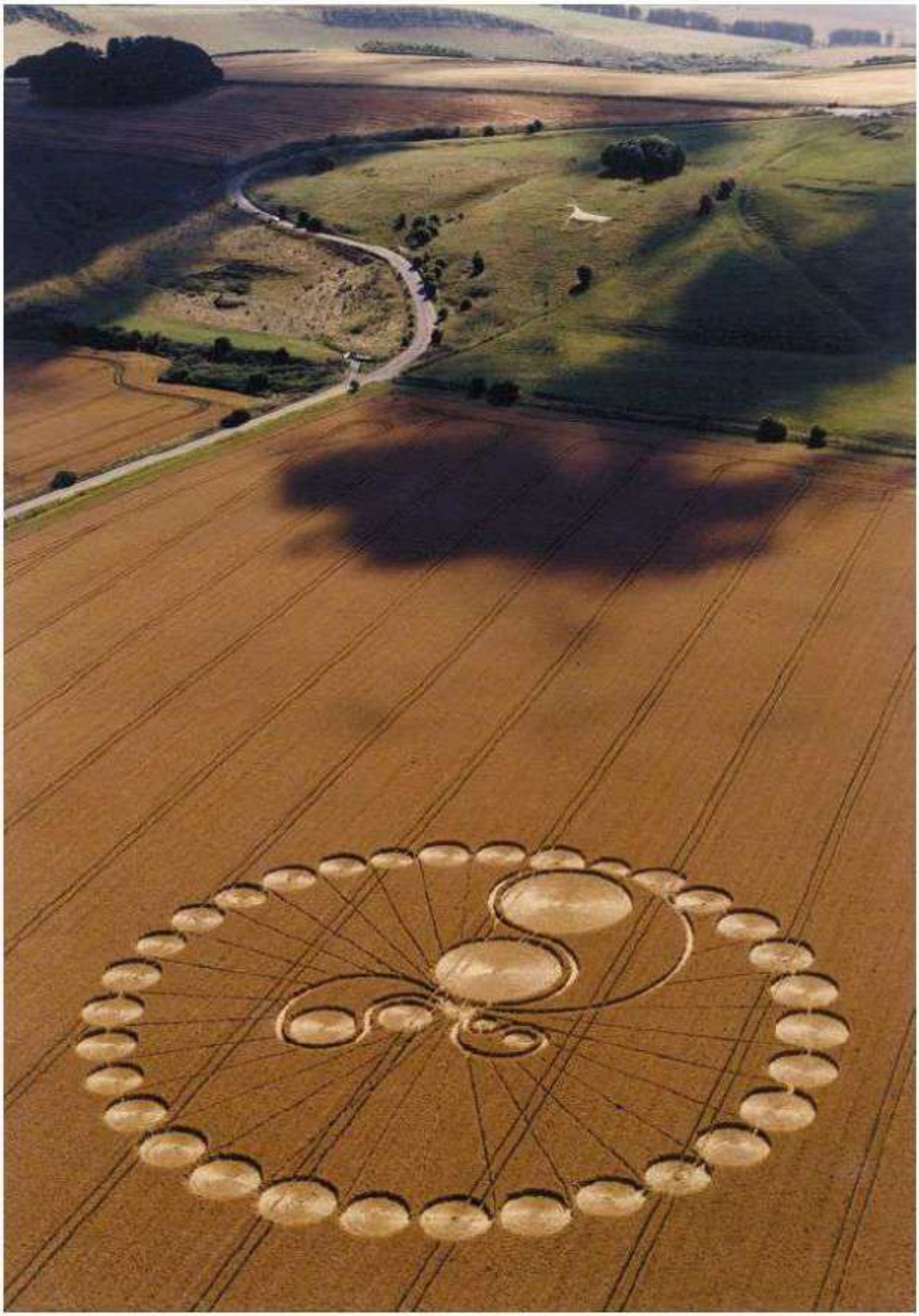
get mud onto the crop and we went into the field and all over was raining, it seemed like a clo... opening in the cloud like an oval shaped opening in the cloud, stayed above us for most of the circle and this stopped the rain, the rain didn't come down on us in the part of the circle, in the part of the field where we were creating the circle, and how that can be, is fascinating.

These things just boggle the mind, you have to be there to see them that they are absolutely fascinating, amazing they draw you in, and this is what keeps circlemakers coming back, it's because these paranormal experiences. Flashes of light, we've seen flashes of light which don't seem to have any particular source. We've seen flashes of light coming from clouds without any thunder noise and on one occasion these flashes of light which were coming from behind the cloud were quite bright and my camcorder which could normally film stars and clouds at night when pointed at these clouds which then had been in a sort of flashing quite visibly on the camera, you can see the stars but you can't see any flashing, and you can hear my commentary on the tape saying you know "oh look, look at the flashes" and nothing was captured on tape, so, you know, you've got things like these which are observed when making the circles.

We usually say an oration, this is coming from years of making circles now, and believing that we're taking part in something, you know, more than just coincidence that we are actually picking up on messages and going out to making circles, so because of this we've incorporated a framework, a spiritual framework to making the circles which involves saying an invocation and this invocation is kind of it's asking for the spirits to come to the circle to give it energy, to protect us whilst we make the circle and also for the spirits to guide us, to give us the idea of what they want put into the circle and also that circle be for good, that people have positive experiences from it and sometimes we ask as well if we can have our own paranormal experiences. And upon asking this on a couple of occasions when I've said ... and please you know "give us a paranormal experience", a shooting star would go overhead upon my saying, you know, that

we want a paranormal experience. And to me this is a very subtle but very personal way for me of just being, you know, "yes you're doing the right thing", yes you know "go ahead and make the circle" you know this is ok, and it's just a warming a warming thing that you get back.

And this is this is it, you see, I mean, to me crop circles is not something that should be studied on paper necessarily, it's something that you should get into, it's something that, you know, you can take part in creating and something that you can get a feedback directly from. I personally think that the magic of the crop circles works best when people don't know their origin. So if a crop circle remains unknown I don't tell anyone that I made it then a crop circle is going to have more energy, people are going to think that it must be something paranormal, and I think by thinking that crop circles are paranormal it becomes paranormal. I think that's like prayer energy that if you pray for something or if you meditate hard on a particular thing that you want, you actually draw that thing closer to reality, you actually will it closer into existence.



Hackpen Hill, Wiltshire, 20 July 2003. Copyright: Andrea Feliziani.

9. Interview with Jez & Midnyte

We first started about 1995, we'd seen a bit on the news and other people claiming to have made circles and such and basically thought let's give this a go to see if it's possible not knowing a great deal about it at the time and, just went into it from there really, obviously as years went on, got more involved, got to understand different things and so on really. Personally I never, at the time I was never a believer, I just thought it was something that went on, and was a bit naīve at the time really back then, isn't it?

Yeah, I was... I was always a bit of a believer in sort of UFOs and crop circles etc., but I sort of had an inkling that there is... you know, there might be people behind it and I wanted to go out and find out, exactly what people could do, and that's what we did, very surprised first time we did it...

[Yeah!]

it was unbelievably easy, compared to what it looks like. Our early circles I don't think any researchers actually found them 'cause they were quite late in the season and they did look very amateurish but

compared to what we thought it would take you know it was "Wow! This is easy, next year we can go out and we can do this properly".

Wasn't really 'til, I think it was the third season which would've been '97 that people actually started noticing them, I think our area was a bit dead, if you like, nobody really used it mainly all went on in Wiltshire, the obvious places, and I think took people a couple of years to realize what was actually going on in the area.

Yeah, and the whole time we were really quite naīve of the whole scene, we had no idea we were just sort of out there.

Basically we'd go to that trouble originally for our own benefit, I have to admit originally it was probably for fun, and then became interesting to see the sort of conclusions that other people would draw and what they would make out of it and we just carried on doing it and got more, into it really 'cause people were coming up with different ideas it was a whole vast range of people with certain conclusions and so on and we just carried on with it really.

Drawing a pattern out on paper's one thing you can make it look nice and it looks quite clever but seeing it stamped into a field a few hundred feet across it's another thing entirely, that's the reason I do it. It's just... It's my art. I'm a complete skeptic now, I'd love to see the paranormal things that other people have reported but I haven't yet, no, yeah it's just the art.

It is art, it's the foremost thing is the art and a logical experiment with that, in the hopes that I'm actually going to see something else, something different. I haven't had any paranormal experiences but obviously keep an open mind and I'd basically like to see what happens. The only thing I suppose you can ever really count is a particular field, obviously I won't say where, and every year we go in there and something will happen we get freaked out or basically. I think it's basically us getting freaked out every year but it's always the same field and we've been doing this for a long time and it never

happens anywhere else, so, hopefully might see some developments along that line, there must be a reason why.

I don't think it's a joke at all, I just you know I do it for me and for other people who might want to see it and somebody running around thinking it's little green men doing it is you know. I haven't put that idea into their heads, I can't talk them out of it so just leave 'em to it, let 'em think that, you know I can't be responsible for what they choose to believe.

I find it very interesting to see what other people think, I don't intentionally set out to deceive anybody, they just make their own ideas up and it was interesting to see what they can come up with really, whilst at the same time not deliberately saying this is a hoax, this is real, it's up to them they can believe what they will really.

(I'm) trying at the moment with a site of mine called THS (Total Human Solution) to get out there sort of just a few demonstrations of what can be done, I mean a lot of people believe that the whole art of circle making is the mystery so I don't want to sort of blow the whole thing wide open and demonstrate everything that can be done all in one circle but I do want to get a few points out there like you know somebody says well this can't be done because XYZ we say well, there you go, there's proof it can be done, and they've still got the chance to sort of fit everything together for themselves.

It seems to be a lot of people out there who... possibly narrow minded, they won't... some people are very... some people only accept their own views, and they refuse to look at the evidence from any other point of view and it's a very handy thing for people to think "oh, hang on... they proved this so this must be the case" and then they've got both sides of the evidence and they won't just channel into their own ideas and not look around basically.

There's an account of an old lady who was healed in a crop circle, and that was a crop circle that we did, but we can't prove it and

nobody believes it, and it's sort of... they're using the old lady's healing as part of their research into crop circles but, I know that I made that circle, I know that, you know, it is man made there's not a phenomenon behind it, and that they're wrong on that point and I want to be able to show that, if the situation comes up again I need to be able to prove it and say look you're not listening to me so here you go here's proof and now you have to listen. With the web site we create the diagrams of the circles before they're done a few months in advance, we encrypt them with a public key encryption system and people can download the encrypted files, and they can keep them on their own computer and... out of my way there's no way I can tamper with them, whatsoever then the circle's made all the judgments about the circle are made and then at any time, you know, at the appropriate time we can release the passwords to the files, the files can be opened and the diagrams that have been created before the circle and kept safe and out of tamperings way, can be seen, and it's just you know proof positive, it's a diagram produced before the event hopefully. I sent quite a few emails out at the launch to every researcher I could think of, and it's interesting that only about fifteen are actually on the mailing list now.

One in particular I sent three emails to, it was Michael Glickman who was on a radio program a year ago saying that he wanted to cooperate and he wanted circlemakers to come forward and, you know, prove what they can do. So I sent him an email mentioning that and he's ignored it completely, he's ignored three sort of stating the whole thing and the last one quoted him from the radio show saying he wanted to work with people and still no response at all.

Probably the web site is a very positive thing it gives the researchers and the public a chance to realize that human beings can go out and make complicated formations, whereas in the paper it will glorify it to some extent and basically not really go into detail of it, so this will give the public and the researchers something to actually going on. A particular formation that we had done and... the gist of what researchers was saying that it was a lot to do with "ley lines" and the

direction in which this formation pointed it pointed to a very significant monument basically and a whole tale gradually evolved as to why it faced this way why it looked like it did when in actual fact all we'd done was gone in there and said "what's this one look like oh, let's do a bit here, let's do bit there" and... basically a long tale came out about as to why was there. It's not exactly a military operation I mean we'd quickly sketch one, I mean, I would say that.

Oh, we've got two modes we work in, really didn't we, we either plan it down to the last detail or we'd just think... let's get out there and do it.

Sometimes it's off the cuff we just quickly scribble one down in the pub and shoot off in the car and off we go, whereas other times we could plan it for a week beforehand depending on where it's gonna be I suppose.

I think the forthcoming Signs movie is going to throw a lot of myths into the air, there's going to be a lot of people out there using the internet to try and find out a bit more and hopefully they're going to get to my site and they will see, you know, a bit of solid proof for them to use, you know, to make their own minds up. THS site will prove specific circles are man made and those circles hopefully can be compared to the unknown ones and people should see that there's no difference, now we're not out to prove every single circle, we're just out to prove that it's possible and people should see that it's a lot more plausible than aliens.

While we do, do circles for a very serious reason, I'd say there's certainly a lot of interest certainly a lot of fun to be had from it, it's a bit strange but it's certainly very interesting to go out at two o' clock in the morning and you've got to hide the car and you've got to sneak around and at the end of it you've actually got something to show for it.

10. Interview with John Lundberg

I think I should start by saying that I started making circles primarily as an experiment, to find out what is humanly possible, you know, what can be done in a field within four hours with three of other people. And I think quite quickly it becomes compulsive, and you see people's reactions to what you do, and... there are very unexpected reactions, there are people who claim to be healed in our formations, people claim to have spiritual experiences in our formations.

I think hoaxers, or should we call 'em "circlemakers", they're very misunderstood. People say that it couldn't possibly be made by people because they wouldn't bother to go to that extent to do something that extreme, or that complex. And that's like... that's completely the wrong way around. Of course we do! We go to kind of the nth degree to the most extreme amount, so I mean the kind of formations that you are seeing appearing now in the fields are way out on a kind of far end of what's humanly possible.

You know, the triple armed spiral that appeared in 1996 at Windmill Hill was... I think if you measure diameters along the curves, is a thousand foot across! And when you have those kind of formations appearing in fields just within one night, people think: "That can't be made by people!". But they can be made by people, I mean basically they are made by people. And part of the reason why we go to so

much trouble, is to kind of take it to something which is seemingly beyond human endeavor. So people go out to the fields or they see it in the press and they say: "My God this is amazing it could not be done by people!". But the motivations of the circlemakers are to actually push it as far as possible so that people think that they can't be made by people. But of course they're made by people!

What's the point? I guess for us, for our team, for me personally, you know we're artists and the circles we make are our artwork... that's the point. What's the point of art? We never played a joke [on] anybody, we never rug-pulled [played a joke] anybody. Our team... the kind of agenda that we have is not to... make a formation, have some one rush in and say "Oh this dowses well, it's genuine!" and then for us to come out to say: "Oh no, here's all the evidence: we took some photographs and here's some time lapse [film] so was making it...# We've never done that, we know it's kind of an agenda of circlemakers who kind of predated us. We just have a very separate agenda which is to as far as possible disassociate ourselves from the specific formations, we've never actually specifically claimed a formation. And we never will, because the whole point and the whole power of our work is gained from the fact that they all for this [difficult to make out]. As soon as you claim a formation you kill it!

You know, we never personally made any money out of our formations but you know for us it's a hobby, it's it's not our profession. It's not like Colin Andrews, you know he makes his living off of it, and... and good luck to him, he's very good at what he does. And the more he does he supports what we do, he basically acts as an agent for our work, so fine you know he's getting payment for that job.

I think we crave publicity for our formations. I don't think we personally crave publicity. Sure we all have egos and sure it's quite nice to sit in front of the camera. No, I crave publicity for my formations not for me personally. For us though it's kind of important

I think to actually... because we're artists, to talk about that agenda and to try and kind of push forward the debate about crop circles and bring that kind of area into it. But into a certain extent we kind of we have to do we have to go in front of the cameras and talk about what we're doing and why we're doing it. I certainly don't crave publicity, no.

I was basically... when I started circlemaking my intention was always to remain completely anonymous, but to a certain extent I was "outed" by George Wingfield, and once that happened you can't really put the rabbit back in the hat. And so we decided just to, you know, to kinda go with that, and use that to our advantage basically: we can talk as circlemakers but we don't have to claim specific formations so we don't take any power away from the phenomenon. And maybe we can kind of throw up interesting arguments and and pushing them, just pushing forward.

Sure we all have a little snigger now and then. No... I enjoy reading people talking about formations like when broadsheet journalists go into a formation like these I did this year, for instance the Kock fractal or the one at Silbury Hill or the one in Milk Hill, the second Kock fractal or when they go in there and they say "These things could not be made by people". You know, we get a kick out that. So if the kind of residual belief in the circles kinda drops away then the phenomenon dies and then we all lose, both sides loose. Like I said before it's a symbiotic relationship, you know, we need them and they need us, and... although bizarrely never the twain shall meet, we need each other.

And the truth is out there, I mean you know, we're sitting here and I took talking quite candidly about what I do, but you believe what you [want to] believe. You believe if you want to say that I work for the government you believe that; if you believe I'm an artist you believe that. Whatever, I don't have a problem, each to his own.

I mean sure we worry about it, but we're extremely careful. It's not to say that it won't happen and I'm sure one day it will happen. It has happened before outside of this country, it happened in Hungary. I think some skeptics were actually caught making a formation. And I think they were taken to court as well. I think they ended up paying the equivalent of 28 pounds for damage to the crop, but it wasn't a particularly spectacular formation. But yes we worry about being caught. We're very careful and if we get caught it's a fair cop.

It's interesting actually over the last couple of years there's been kind of bit of a sea change. Well I'll go back. Before yes we we've had troubles, we've had... hang up phone calls, we've had threatening mail, there have been attacks on... physically on some circlemakers, not myself, and on their property. So yes, you know, there is... there is a certain risk in doing what we do. I actually have if you want me to show you some of the threatening letters that we've actually received [Black Watch letters].

Absolutely yes on several occasions... I myself have had a series... back in 1994 there was three occasions towards the end of the season where I myself and the other circlemakers were seeing flashes of light, balls of light, kinda little moving and crackelling. More recently this year, we're out circlemaking in Wiltshire, and saw an amazing kind of like burst of light and then a column of light. Spectacular! No sound, completely silent. We... I haven't really seen like a 50 foot craft with gray aliens hanging outside of it, but we seen some pretty weird shit while we're down there in the fields, you know.

On several occasions there's been times as when we're drawing diagrams, and the formations have appeared in the field before we've got there to make it. Certain weird synchronicities and certain... I mean themes appeared in years in the actual formations and I guess as a certain amount of the teams feeding out of each other. But, you know, I think there's been a lot of 6 fold geometry this year and certainly a lot of the early formations that appeared we were not responsible for and they all had 6 fold geometry and had

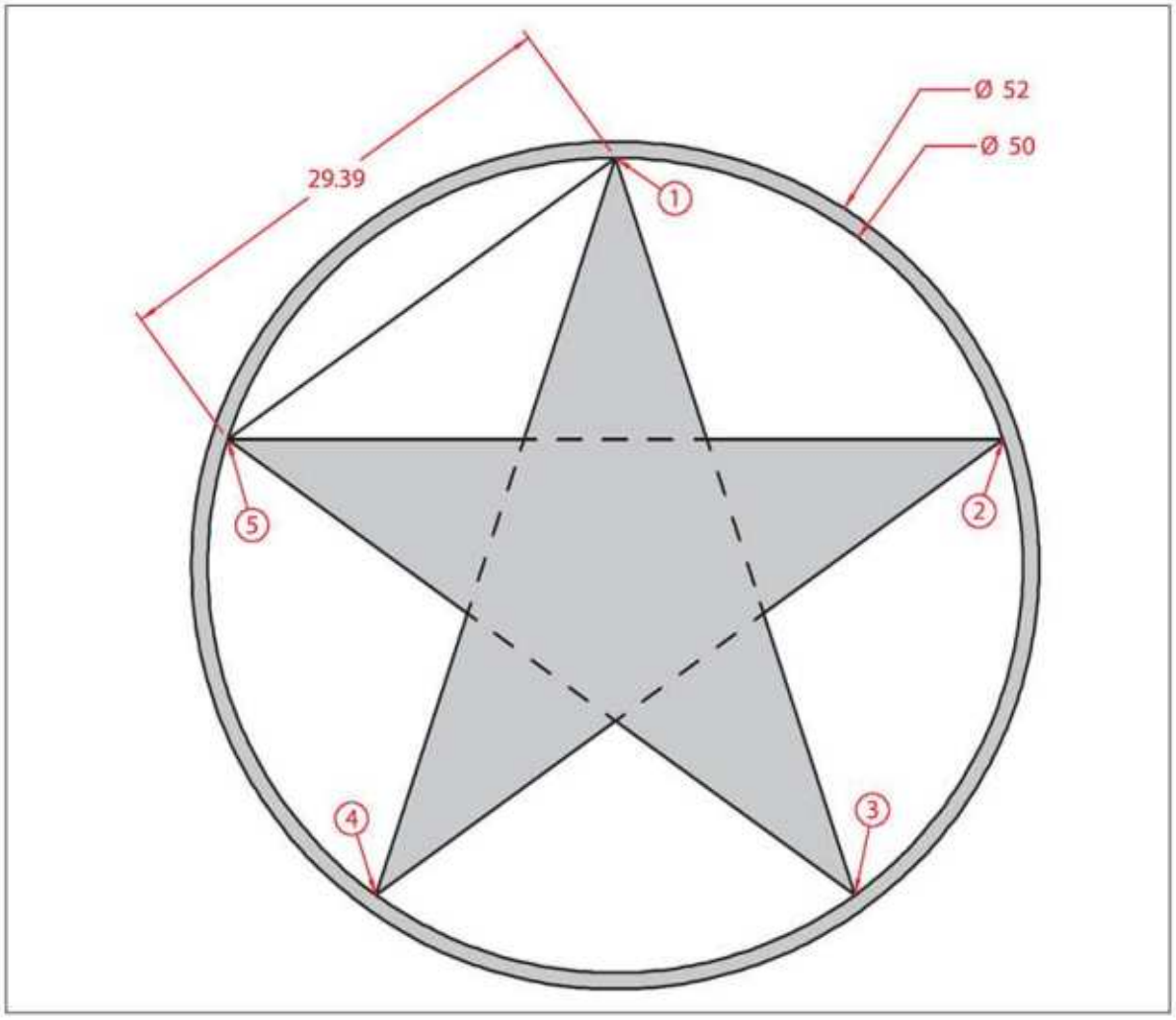
they similar geometry to the stuff we we’ve been working on over the winter. So yes there is a certain amount of synchronicity... a kind of cosmic coincidence.

APPENDIX F

Circlemaking exercises: proposed solutions

Exercise 1

This is a very easy exercise. Tracing the main circumference with a 25-metre radius and the outermost circumference with a 26-metre radius is trivial and therefore is not discussed. The challenge was to calculate the distance between each one of the five points to be marked in the main circumference. The answer is 29.39 metres.



Exercise 1: The distance between the vertices of the pentagon is 29.39 metres. Illustration by Francesco Grassi.

Steps:

– trace the circumference with a 25-metre radius

– mark the five points on the circumference at a distance of 29.39 metres from each other

– two circlemakers hold the tape measure taut between points 1 and 3

– using his or her feet, the third circlemaker traces the straight line from point 1 to point 3.

– repeat this process at the other appropriate points (2-4, 3-5, 4-1)

– flatten the entire area delimited by the straight lines (the inside of the star)

– trace the circumference with a 26-metre radius

– flatten the 1-metre-wide annular region between the two circumferences

The minimum number of circlemakers required for this solution is therefore 3.

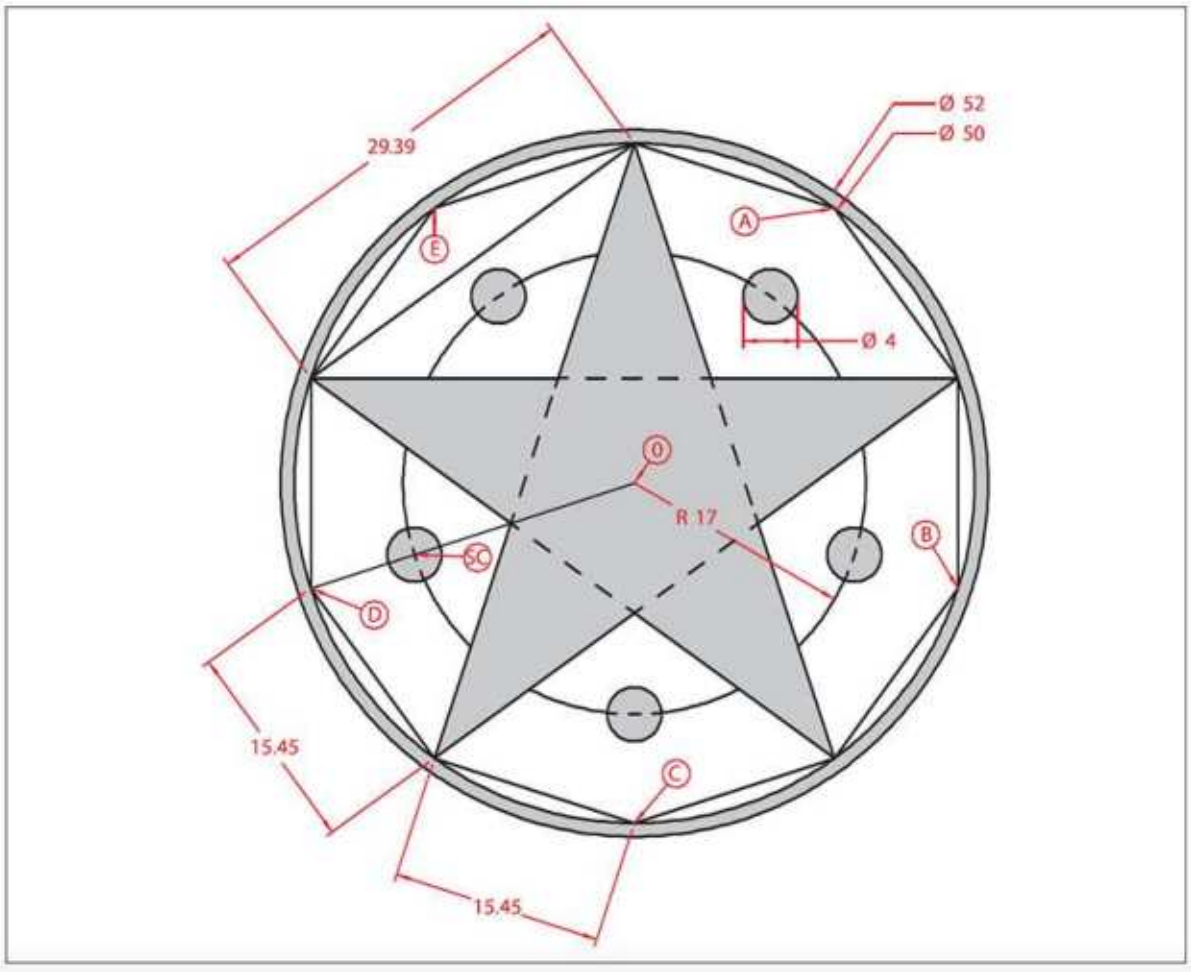
Note that the sides of the central pentagon (construction lines 30-40 cm wide) remain below the flattened crops.

Exercise 2

This exercise can be seen as an embellishment step at the end of the previous exercise. The proposed solution is not the only possible one.

In this case our strategy is to mark 5 more points in the main circumference in addition to those of the previous pentagon. We will trace the other 5 vertices of the imaginary inscribed decagon.

Taking any one of the 5 vertices of the star as a reference, the distance to be considered is 15.45 metres.



Exercise 2: The 10 points to be marked are the vertices of the imaginary inscribed decagon with a side 15.45 metres long. Illustration by Francesco Grassi.

Assuming that you've already done the previous exercise, these are the additional steps:

– mark the 5 new points (A, B, C, D, E) on the circumference

– trace the circumference with a 17-metre radius

– two circlemakers keep the tape measure taut between the centre (point 0) and point D

– the third circlemaker reaches point SC (centre of the satellite) and uses the plank to create directly a circle with a 1-metre radius

– the third circlemaker then expands the circle's radius to 2 metres

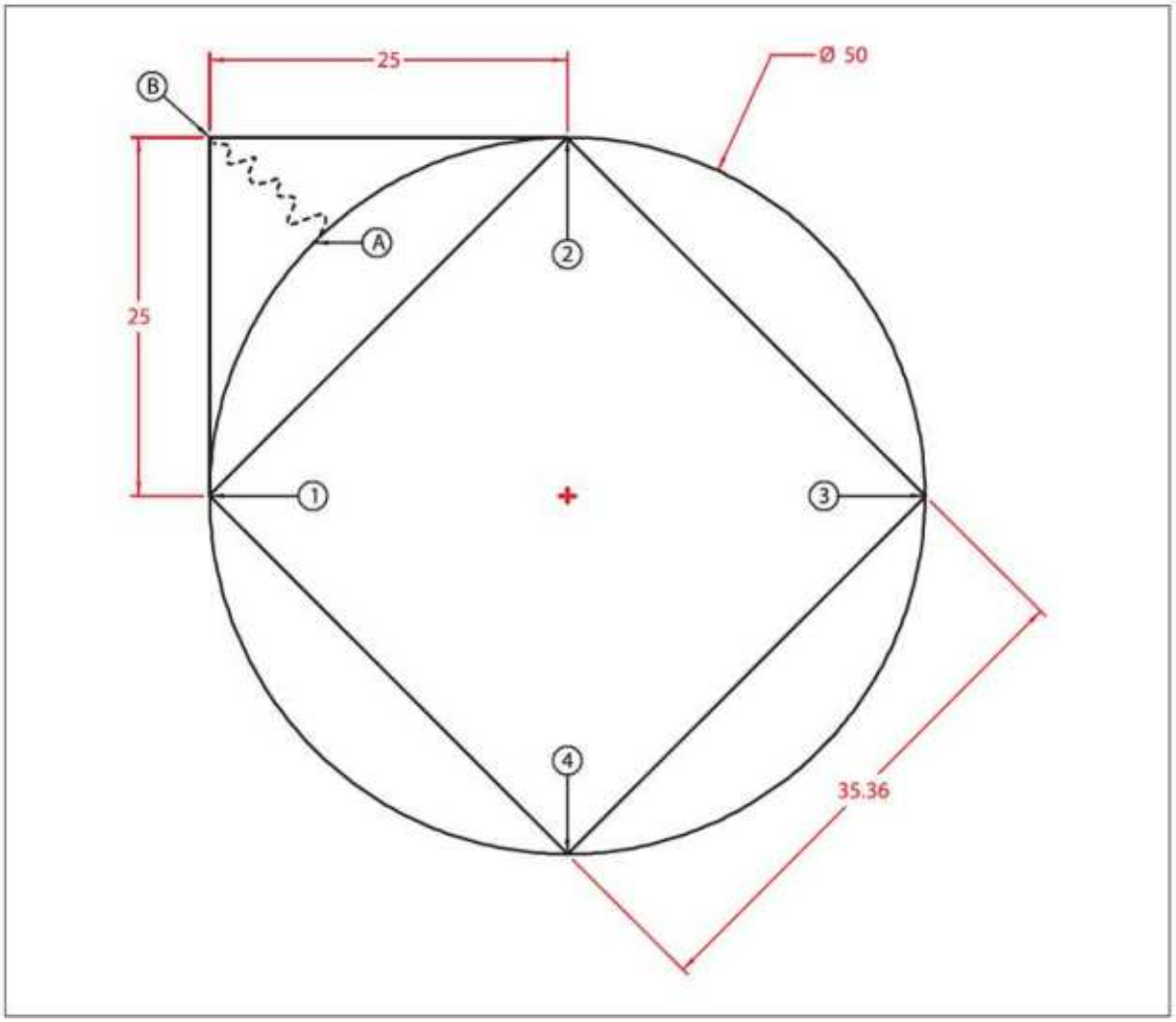
– the procedure is repeated to create the other 4 satellites

The minimum number of circlemakers required for this solution is therefore 3.

Exercise 3

Solving this exercise probably requires an unconventional approach in order to cope with the challenge of tracing the figure so that it is circumscribed by the main circumference.

It is certainly necessary to mark 4 points on the main circumference. The distance to be considered is 35.36 metres.



Exercise 3: The crops damaged *during travel from A to B will not be visible in the end because the area will be flattened later. Illustration by Francesco Grassi.*

Steps:

– trace the circumference with a 25-metre radius

– mark the 4 points (1, 2, 3, 4) on the circumference

– two circlemakers stand respectively in points 1 and 2 **after unwinding completely** a **50-metre** tape measure

– the circlemaker at point 1 holds the **zero** (the first end) of the tape measure

– the circlemaker in point 2 holds the **50-metre mark** of the tape measure (the second end or the end of the tape measure)

– the third circlemaker moves to point A, which is more or less central along the circular arc (the precision of the point is not important)

– the third circlemaker **grips with one hand** exactly halfway, i.e., at **25 metres**, the tape measure (the ends of which are held by his associates at 1 and 2)

– the third circlemaker enters the wheat that is still upright, starting from point A and moving towards point B (to be determined. As he or she advances in the wheat (curved dashed line between A and B), the two parts of the tape measure (each 25 metres long) gradually become taut until they are both taut **only** when point B has been located

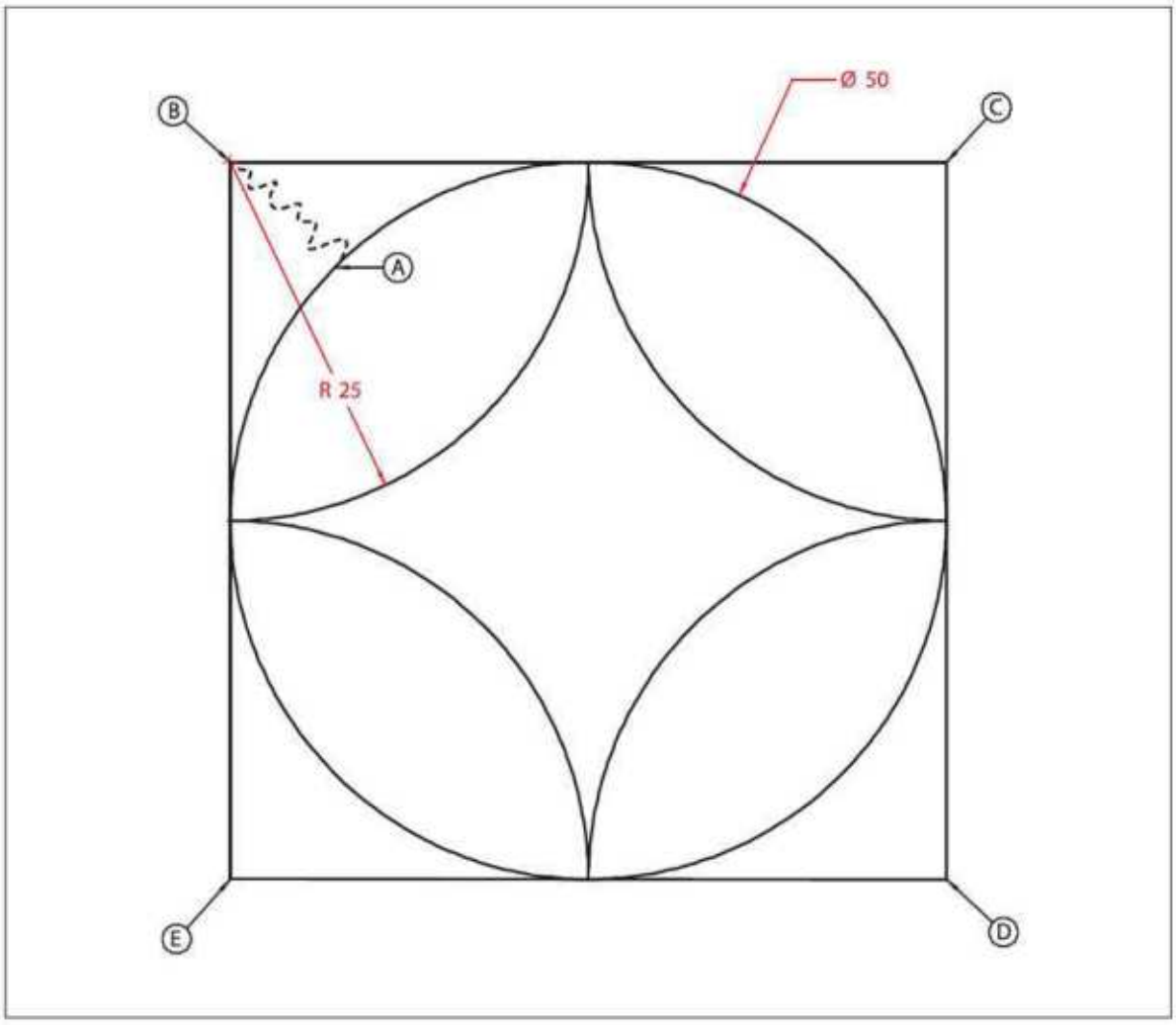
– a fourth circlemaker traces, with his or her feet, the straight line starting from point 2 towards point B and then towards point 1

– this process is repeated for the other 3 vertices of the circumscribed square

– starting from the 4 vertices, the arcs with a 25-metre radius are traced

– the identified sectors are flattened

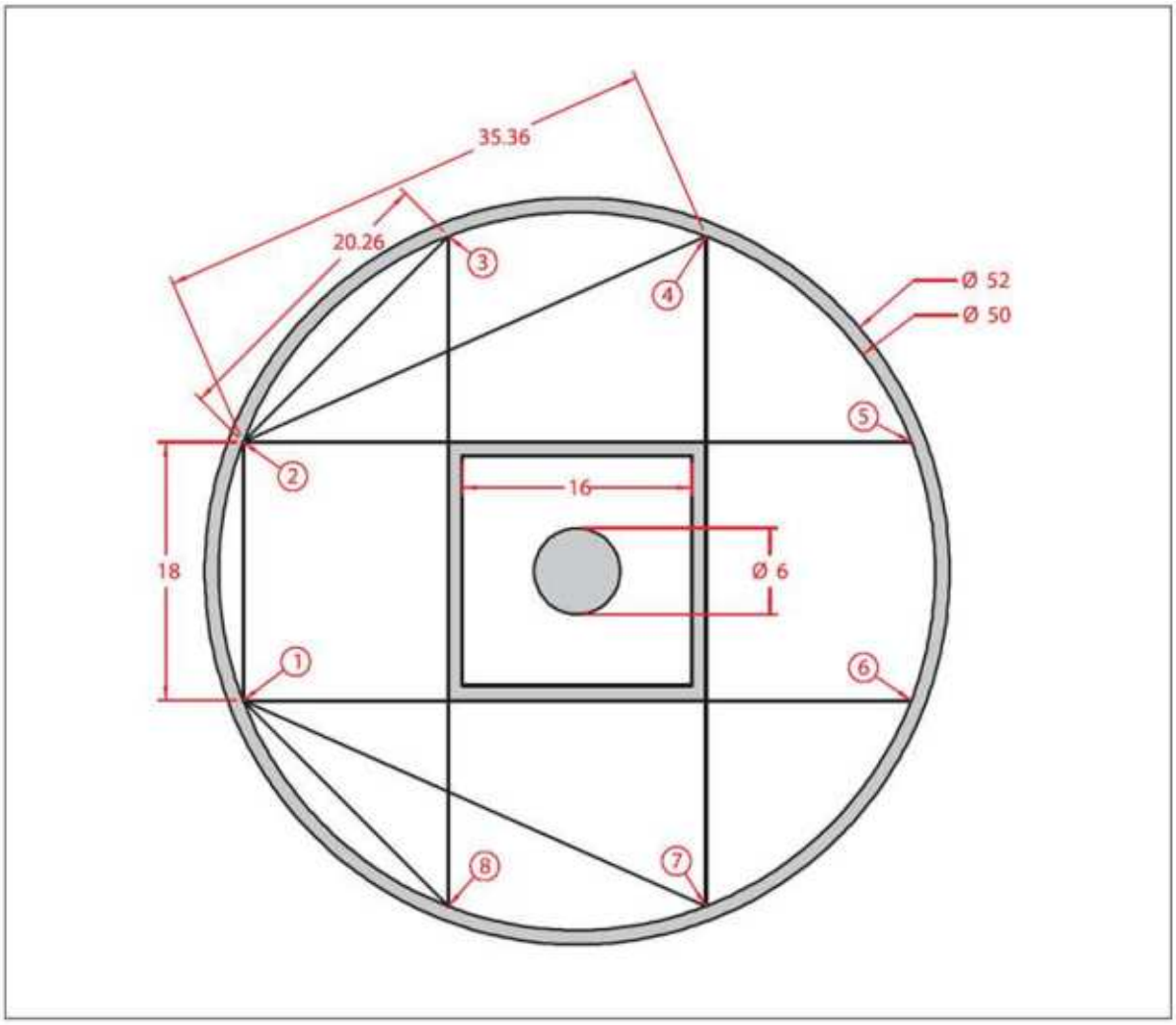
The minimum number of circlemakers required for this solution is therefore 4.



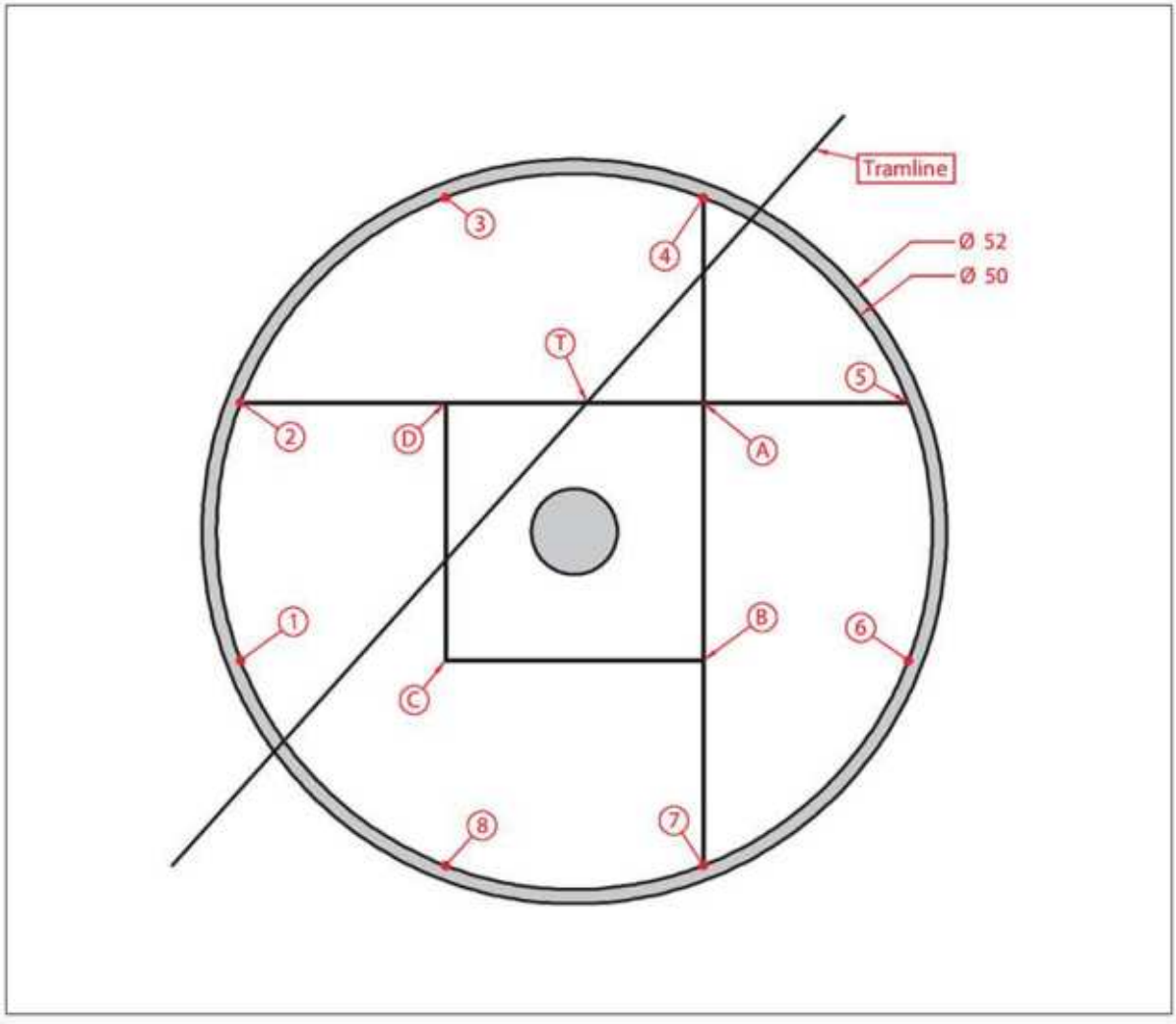
Exercise 3: Once the 4 vertices of the square have ben located and after tracing the sides, it is possible to trace the arcs with a 25-metre radius. Illustration by Francesco Grassi.

Exercise 4

The difficulty of this exercise is to transfer the projections of the vertices of the internal square onto the main circumference. We will need to mark 8 points on the main circumference.



Exercise 4: It is convenient to mark the 8 key points on the main circumference. Illustration by Francesco Grassi.



Exercise 4: To trace the sides of the internal square it is necessary to use a tramline in order to locate point T. Illustration by Francesco Grassi.

Steps:

– trace the small circumference with a 3-metre radius

– trace the circumference with a 25-metre radius

– trace the circumference with a 26-metre radius

– flatten the 1-metre-wide annular region between the two circumferences

– decide at will the location of point 1

– place point 2 18 metres away from point 1

– place point 3 20.26 metres away from point 2

– place point 4 35.36 metres away from point 2

– check that points 3 and 4 are 18 metres apart

– place point 8 20.26 metres away from point 1

– place point 7 35.36 metres away from point 1

– check that points 7 and 8 are 18 metres apart

– place points 5 and 6 starting from point 4 (or from point 7)

– check that points 5 and 6 are 18 metres apart

– two circlemakers move to points 2 and 5 respectively, keeping the **first tape measure** taut

– two **other** circlemakers move to points 4 and 7 respectively, keeping a **second tape measure** taut

– the fifth circlemaker moves to point T (intersection between the first tape measure and a tramline) by walking along the tramline

– the fifth circlemaker uses his or her feet to trace the line from T to A and marks point A (intersection of the two tape measures held by the 4 circlemakers)

– the two circlemakers who were standing at points 2 and 5 move to points 1 and 6; the new intersection of the two tape measures therefore locates point B

– the circlemaker who traced the line from T to A can continue from A to B

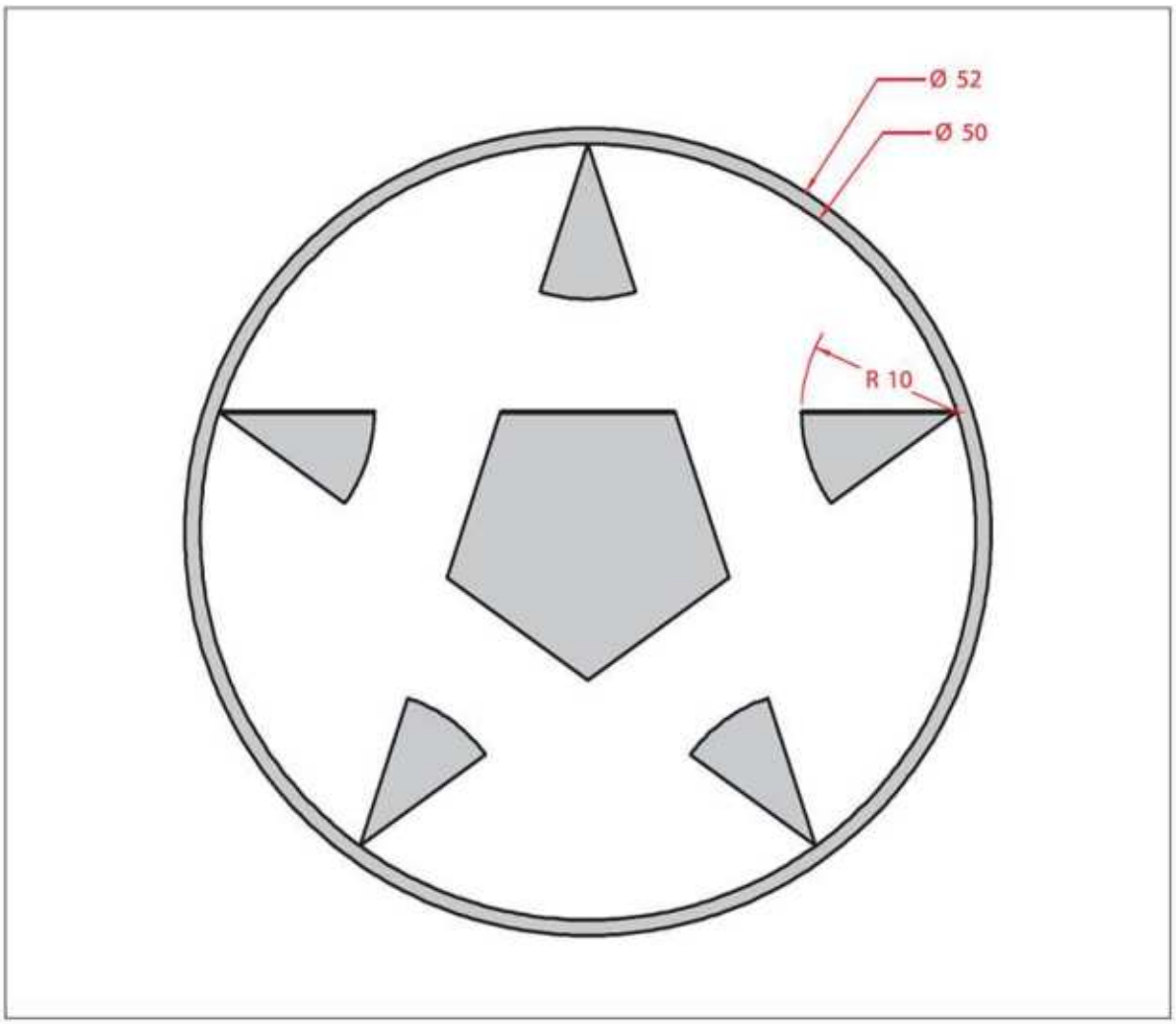
– this is repeated to trace the line from B to C and then from C to D

– after tracing the internal square with 18-metre sides, it is possible to create the smaller square with 16-metre sides

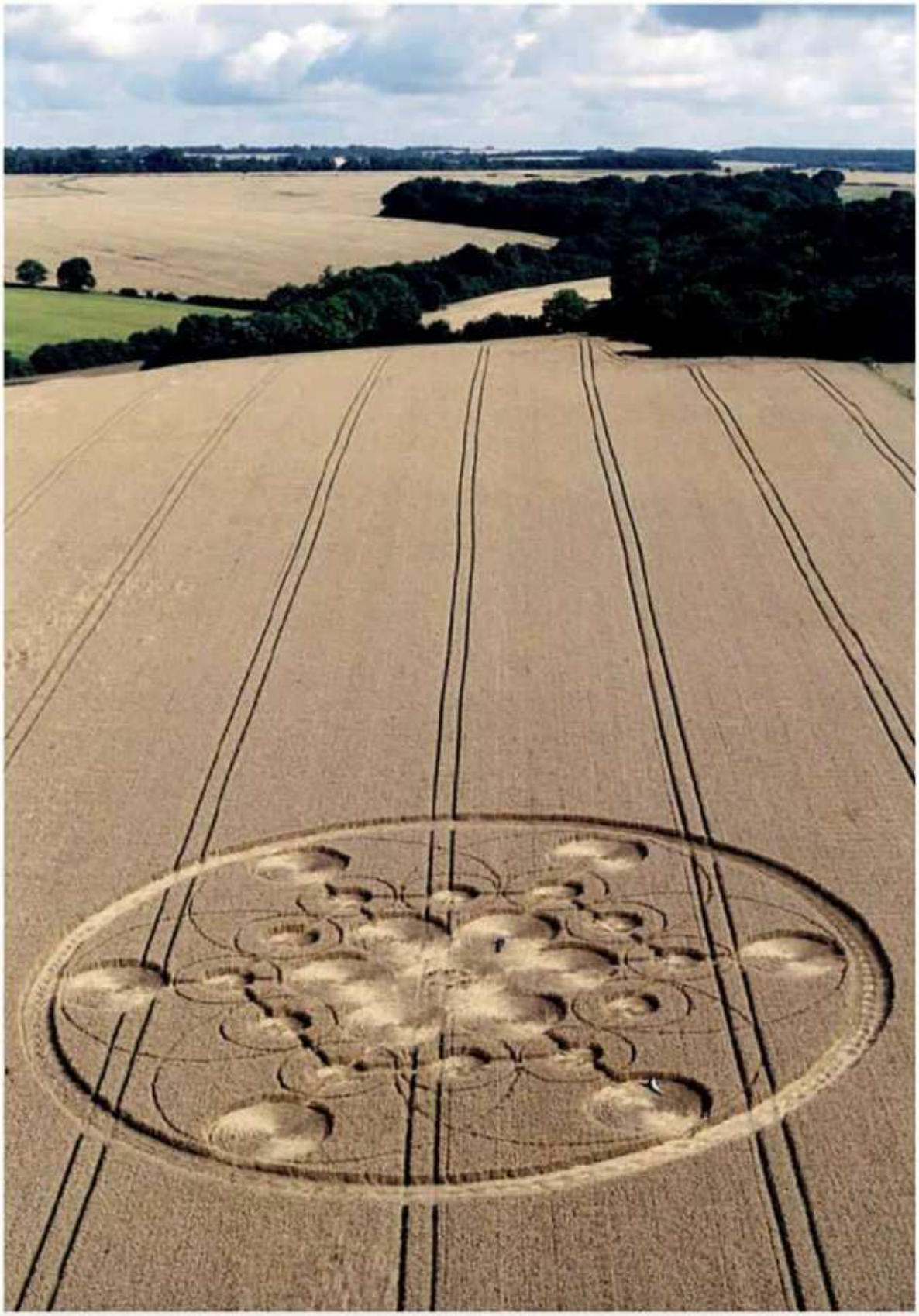
The minimum number of circlemakers required for this solution is therefore 5.

Exercise 5

If you've got this far, you've certainly acquired the skills needed to plan and create the figure proposed in this exercise. If you are unable to solve this challenge, please contact me by e-mail at *francesco@francescograssi.com*.



Exercise 5: Internal pentagon with embellishments. Illustration by Francesco Grassi.



Scrope's Wood, Wiltshire, 22 July 2003. Copyright: Andrea Feliziani.

APPENDIX G

Balls of Light Correspondence

1. Balls of Light: The Questionable Science of Crop Circles

by Francesco Grassi (Chartered Engineer, CICAP Experimentation Group, Padua, Italy), Claudio Cocheo (researcher, Fondazione Salvatore Maugeri - IRCCS, Centro di Ricerche Ambientali, Padua, Italy), Paolo Russo (programmer, CICAP, Padua, Italy). Published in the Journal of Scientific Exploration*, Vol. 19, No. 2, pages 159-170, 2005 [link].*

The official history of mysterious circular patterns appearing in crop fields began in 1980 when Dr. Terence Meaden's attention was drawn to a formation in a field of oats near Bratton (England) beneath the steep grassy slopes upon which the famous White Horse of Westbury is cut into the underlying chalk (Meaden, 1991).

These ‘‘first’’ circles were called ‘‘mystery circles’’ or simply ‘‘rings’’, but since circa 1988 they became identified all over the world as ‘‘crop circles’’. Crop circles consist of geometrical crop regions, in which the plants (primarily cereal crops) are flattened in a horizontal position.

Over the years, crop circles rapidly gained media attention, evolved from simple circular shapes to more and more complex patterns, and

their number increased from dozens at the beginning of their documented appearance to hundreds only some years later. During the 1980s and 1990s, for example, the number of circles appearing in Britain grew rapidly from only a handful per year in the early 1980s to dozens by the end of the decade and to several hundred in the U.K. alone in 1991.

Many people during the years admitted they had made the circles themselves, but in spite of these confessions, the ‘‘believers’’ continued to deny claims of human involvement as the only origin of the whole phenomenon. Many alternative theories proliferated attempting to explain the possible non-human mechanisms for the circles’ creation. Most of the claims about circles were nothing but mere hypotheses that never gained sufficient reliability to hold up upon examination by a peer-reviewed scientific journal. Only three studies were published in a scientific journal: the first one was authored by W. C. Levengood (1994), the second one by W. C. Levengood and N. P. Talbott (1999), and the last one by E. H. Haselhoff (2001). All three papers suggested the involvement of some kind of electromagnetic radiation during the circles’ formation. However, in those three papers a list of sufficient conditions (or at least necessary conditions) was not provided in order to establish without any doubt if a geometric formation has or has not been made by man.

Levengood (1994) asserted he had found anatomical alterations (the so-called anomalies) in crop formations which could not be accounted for by assuming a man-made origin of the circles. Among other anomalies that we are not discussing here, he observed an allegedly ‘‘anomalous’’ expansion of the stem nodes of the plants lying inside the crop circles when compared to those outside them (this was the so-called alpha-test, i.e. the ratio of the stem length to node length).

Levengood concluded that these alterations were probably caused by a thermo-mechanical effect due to a thermal expansion of the cell

walls directly related to an absorption of electromagnetic energy. During an experiment carried out in Maryland in 1997, Levengood and Talbott (1999) made, by themselves, a crop circle, claiming that the gravitropic response of the flattened plants was no more than about 10% in the three days since the circle creation, too little to explain the elongations observed in the alleged ‘‘genuine’’ formations. We will discuss this assumption later in this paper.

In 1999 Levengood and Talbott (1999) published the results of the monitoring carried out on three simple circular formations at Devizes (England, 1993), Chehalis (Washington, USA, 1994) and Sussex (England, 1994). A fourth case is reported, analysing a more complex spiral formation which appeared in a barley field in Beckhampton (England) in 1995.

It is very important to highlight that two of the three crop circles appeared in areas where numerous known circlemakers live and have been creating crop circles for over a decade. The Devizes formation appeared in an area near Beckhampton, Wiltshire, close to where the first major crop circle hoax occurred at Bratton in July 1990 (‘‘Operation Blackbird’’), where an earlier hoax sponsored by national newspapers took place in 1983, where a major group of circlemakers called the ‘‘United Bureau of Investigation’’ lived and made circles from 1990 to 1991, and where the Wessex Skeptics made formations to test crop circle researchers in the early 1990s. The Sussex formation appeared in an area where the evidence for crop circle hoaxing was less overwhelming than at Beckhampton but where a number of possible circlemakers live. Samples were taken from an area where even the most paranormally inclined crop circle researchers have subsequently admitted that crop circle hoaxing is rife. These samples are also close to the two areas where Doug Bower and Dave Chorley allegedly began making crop circles in the 1980s (South Wiltshire, Alfriston, East Sussex). Both areas appear to have attracted considerable copy-cat hoaxing of the original Doug and Dave circles.

Levengood and Talbott collected groups of 10-15 plants at each sampling location, defined by the distance from the centre of the circle, and averaged their stem node lengths. By plotting the distance from the centre of the circle against the logarithm of the group averages of the stem node lengths they found a linear relationship between the two variables. Thus, the node lengths seemed to decrease from the centre to the edges of the flattened areas following a negative exponential trend (Table 1).

TABLE 1
Experimental Data Measured at Devizes, Chehalis and Sussex Formations. Distance (d) From the Circle Centre and Average Node Length (N_L) Are Reported. The Apex [c] Indicates Data Measured at Standing Central Tufts; Data Indicated With the Apex [e] Are Exterior to the Circle Diameter

Devizes		Chehalis		Sussex	
d (m)	N_L (mm)	d (m)	N_L (mm)	d (m)	N_L (mm)
0.303	6.0	1.110	4.1[c]	0.315	4.6[c]
1.510	4.4	1.825	3.7	1.558	3.5
1.529	5.5	4.543	3.5	4.476	3.3
2.812	4.4	9.109	3.3	4.830	3.4
2.897	4.3			12.224	2.8[e]
3.300	3.3[e]			19.775	2.4[e]
control	3.2	control	2.9	control	2.4

The authors suggested that this behaviour agreed with an electromagnetic energy absorption caused by plane wave fronts propagating in the air, according to the Beer-Lambert law, and striking the plants.

They described the relationship between the node lengths and the radiation intensity as:

$$N_L = B(I/I_0) = b(e^{-\alpha cd})$$

where N_L is the node length, b a proportionality constant, α the absorption coefficient of the air, c the concentration of absorbing

molecules, I_0 the radiation source intensity and I the radiation intensity at distance d from the source.

Two years later, Haselhoff (Haselhoff, 2001) criticised this paper, pointing at two major flaws: the normal node length was assumed to be zero and energy spreading with distance was not taken into account. He then suggested correcting the first error by subtracting a term N_0, representing the average node length of undisturbed (control) plants outside the formations. He implicitly accepted both the questionable sampling strategy of the Levengood and Talbott experiments and the thermo-mechanical hypothesis explaining the node elongation.

Haselhoff's paper focussed on a new model for the electromagnetic radiation allegedly involved in the circles' creation. Analysing the data of the first three above-mentioned formations, Haselhoff identified a reciprocal quadratic trend for the stems' elongation with radial distance. Therefore, he proposed an electromagnetic point source model, assuming it as a ''Ball Of Light'' (BOL) irradiating the underlying crop field. In order to support his hypothesis he reported, as a counter-proof, the results of a study carried out on a surely manmade formation in Nieuwerkerk in 1997, in which the same reciprocal quadratic trend seemed not to be evident.

The BOL hypothesis consisted of a model describing the decrease with distance of the intensity of a spherical electromagnetic wave front centred at a point source located at a finite height, h, above the field (Figure 1).

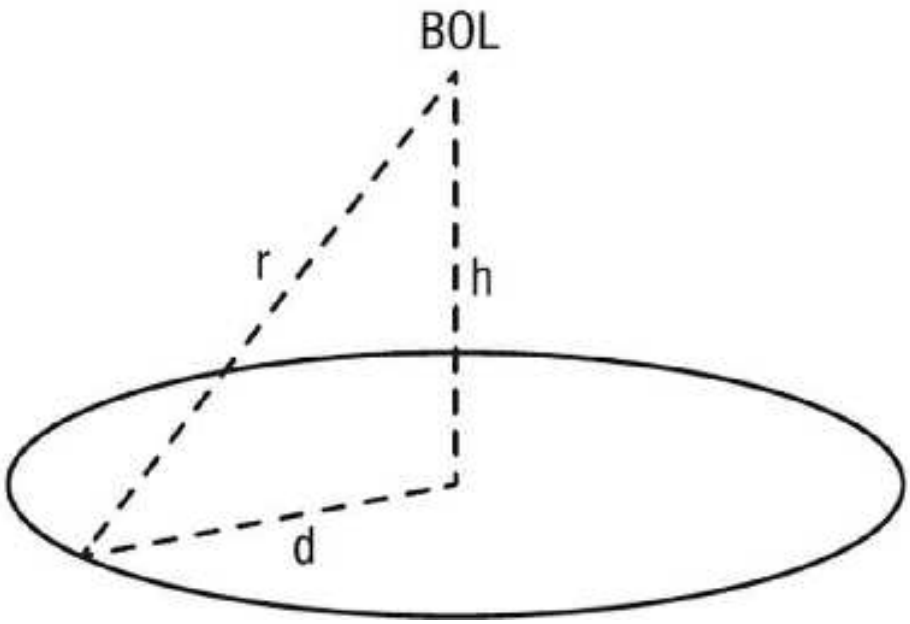


Figure 1. Geometric representation of the BOL coordinates.

Though not reported in the article, the model equation can be obtained by simple physical considerations, assuming a $1/r^2$ decrease of the field intensity multiplied by a proportionality constant:

$$N_L - N_0 = b/r^2$$

where b is the proportionality constant and $r^2 = d^2 + h^2$, where d is the distance on the ground from the centre of the circle and h the height of the hypothetical source from the centre of the circle. For each formation the parameter h was optimised to best fit the data to a $1/r^2$ decrease. Scaling the x axis as $1/r^2$ and putting $N_L - N_0$ as the ordinates, if the BOL hypothesis is correct, a high coefficient of multiple determination (R^2) is expected.

Discussion

Because of the sensational scientific contents of this finding and the great impact exerted on world-wide public opinion, a more exhaustive inspection of the data handling and the statistical analyses seems to be mandatory according to the accepted rule that extraordinary claims require extraordinary proofs.

Before starting the discussion, we believe it important to highlight that the three articles above mentioned are actually considered by the crop circle community to be the ‘‘scientific reference point’’ on the subject. *Physiologia Plantarum Journal* played a crucial role in publishing all three articles and giving these authors scientific support and credibility. Furthermore, our article was first submitted to *Physiologia Plantarum Journal* and its editorial board agreed with our comments about the pseudoscientific contents of the three articles (*Physiologia Plantarum Journal*, communication to the authors, 2004), but it refused to publish our article with the surprising motivation that ‘‘there is not a scientific discussion going on the crop circle subject’’.

Our first remarks to Haselhoff’s paper concern the sampling strategy and the statistical approach. Both the number of circles taken into account and the number of samples collected inside and outside each formation are inadequate to carry out a reliable statistical analysis.

It is noticeable that in his 2001 article in *Physiologia Plantarum Journal* the number of samples taken at each site is not listed. This is a surprising omission, as most scientific papers list sample sizes to help demonstrate that the statistical patterns they discuss are not limited to just a few data points. This is an important consideration, as Haselhoff’s 2001 *Physiologia Plantarum Journal* paper clearly implies that the effect they claim to have discovered applies to many crop circles, not just a few.

In the case of the Chehalis set, for example, data were collected from only three sampling points, so it is not surprising that a two-

parameter model can fit three points rather well, though this carries no indication for a cause-effect relationship.

Moreover, the BOL model is characterised by two parameters: the height, h, of the BOL from the ground, and the proportionality constant b. The parameter b is not so meaningless as to be superficially neglected in Haselhoff's paper, but it should play a crucial role in the undergoing process. As a matter of fact, the parameter b contains all the non-geometrical information. In reality, it represents a set of multiple variables rather than a constant. It describes all the physical properties of the phenomenon, such as, for example, the radiation duration, the spectral range of the emitted light, the source intensity, the air absorption, the moisture content in the plants and the surrounding soil, the absorbing and reflecting properties of the plants and the ground, and so on.

In the cases of the formations at Devizes and Chehalis, both inside a wheat field, we found, respectively, b = 0.3 and b = 68.9; these are very different values. Not only did Haselhoff omit an explanation of the meaning of the parameters and their actual differences but he also omitted an indication of their values. In particular, only the height, h, is listed in table 1 of Haselhoff's paper. As a consequence, the BOL model may seem to possess only one parameter, the height h, and an apparently high performance for a model with just one parameter.

Another remarkable point concerns the lack of a standardized criterion for the inclusion of data sets in the control group. Some plants taken very far from the formations were defined as ‘‘control’’ and considered as undisturbed samples; their average values and standard deviations were calculated in order to allow a comparison between affected and unaffected plants. Bent plants inside the formations were considered ‘‘affected’’ (i.e. non-control). As a matter of fact, even some upright plants, taken outside the formations, were considered affected and not control: two samples at the Sussex formation were collected about 6 and 14 m away from the circle limit,

and one sample at Devizes was collected 30 cm outside the formation (Figure 2a and c).

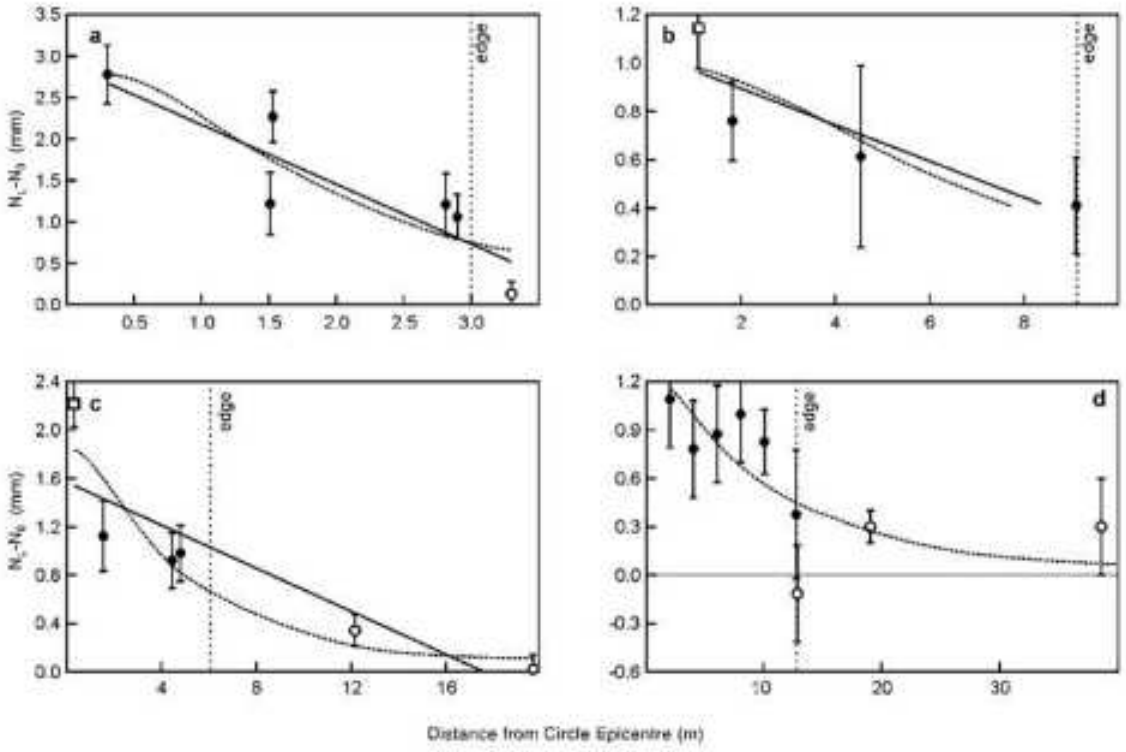


Fig. 2. BOL (dashed line) and simple linear regression analysis comparison for (a) Devizes, (b) Chehalis, (c) Sussex and (d) Nieuwerkerk formations. The central tufts data are included in the analysis. Empty square symbols indicate standing central tufts data; empty circles indicate samples collected outside the crop circle diameter.

No justification for this decision is provided in the paper. No distance threshold for inclusion in the control group is mentioned. We have to suppose that the authors decided to assign these plants to the ‘‘affected’’ group rather than to the control group after seeing that their nodes were longer than those of other control plants. This procedure is bound to produce biases.

There may be some reason to include a few external upright plants in the ‘‘affected’’ group, since the authors seem to be looking for

effects that might not necessarily be restricted to the flattened area. However, if an objective criterion is not clearly stated up front, any subsequent analysis becomes questionable, because the standard deviation of the control level may be underestimated, allowing affected values to look more anomalous than they are.

Moreover, if the circle border is not used as a criterion, it becomes more difficult to ensure that the effect being analysed is actually caused by the creation of the circle and not by other concurring reasons. This is particularly relevant considering that the analysis lacks spatial resolution because of the small number of samples included and considering that control plants are taken only very far from the circle, where environmental conditions might have been slightly different. No statistical tests have been applied to compare means and variances of samples taken inside and outside the formations. Any conclusion concerning the comparison of samples coming from the formations and those from the whole crop field are therefore not supported by a robust statistical analysis.

Figure 2a through c shows the data from the Devizes, Chehalis and Sussex formations. The radii of the three circles were, respectively, 3, 9 and 6 m, and all the outside standing plants should be considered as control samples, unless a different criterion is defined.

Nevertheless, the first right point in the Devizes graph and the first two in the Sussex one were reported and fitted in the regression models by both Levengood & Talbott and Haselhoff, in spite of their true nature as controls. Especially surprising is the Sussex case, in which the control level confidence interval is very small, while one of the samples (control) is very far from it. Clearly, this point was excluded from the calculation of the standard deviations of the control levels, giving rise to lower than actual values and thus avoiding a reliable comparison between the inside-circles node length variability and that of the whole crop field.

At the Sussex and Chehalis formations, circular shaped epicentre tufts of standing plants occurred, but these data were discarded from the regression analyses, in spite of the fact that those plants belonged to the core of the circle and despite the importance of those samples as a result of their proximity to the alleged radiating source. Levengood and Talbott excluded the central point, although, thanks to the omission of the energy spreading factor, it was not a singularity in their exponential model. Although Haselhoff might have left out the central tufts in order to compare his results with those of Levengood and Talbott, he should have included them in order to correctly evaluate the performance of the model.

Moreover, we question the lack of information about the statistical significance of the BOL model parameters. This is a crucial task, because it invalidates the reliability of the linear regressions based on the h-optimised transformation of the x axis. Repeating Haselhoff's regression analyses with the original data, we found that the parameter h was not statistically significant at $\alpha = 0.05$ level (Table 2a); that is indeed a generous limit for an unusual claim. Including the central tufts into the data sets, both the coefficients of multiple determination (R^2) and the statistical significance of the parameter h decrease (Table 2a); thus, the BOL model appears statistically meaningless, or, at least, it is not significant enough to be sufficiently confident in the existence of an electromagnetic point source radiating the crop circle.

	Excluding standing plants of central *tuft*			Including standing plants of central *tuft*		
	Chehalis	Sussex	Devizes	Chehalis	Sussex	Devizes
R^2	0.99	0.97	0.78	0.78	0.84	—
h	9.5	7.8	1.9	6.3	4.4	—
p-value of **h**	0.09	0.07	0.13	0.30	0.17	—

TABLE 2a. Parameters of the BOL model applied to the Chehalis, Sussex and Devizes data. R^2 is the coefficient of multiple determination, the parameter h *is the height above ground for the radiating point source,* p*-value of* h *is the probability (ranging from 0 to 1) that*

the actual parameter is zero. Haselhoff results were obtained excluding the standing plants at central tufts. Both excluding and including the central tufts, the BOL model parameters are not statistically significant at the 95% confidence interval (because the p*-value of* h *is greater than 0.05). The inclusion of standing plants in the central tuft is not applicable for the Devizes formation.*

We point out also that a simple linear regression, with the same number of parameters, fits the data sets better than the BOL model (Table 2b). Of course, we are not suggesting the existence of a specific underlying linear phenomenon, we are only pointing out a basic concept: correlation is not proof of causation. Furthermore, it is very important to remark that performing statistical tests with so little data is likely to result in ‘‘freak’’ results which are unlikely to be statistically significant.

From a physical point of view it should be pointed out that the BOL model is not realistic. A hypothetical BOL model should be much more complex, because the striking energy will depend on the incidence angle of the radiation on the stem nodes and the energy absorption will depend on the path length of the radiation inside the plants and therefore on their actual transparency. A nontransparent stem partially shields the node, so Haselhoff's model is only valid if we assume that the plants are completely transparent to the striking radiation and so could not absorb energy at all. Therefore, if a light point source really radiates an underlying crop field, its imprint should not show, anyway, a $1/r^2$ decrease trend.

	Excluding standing plants of central tuft			Including standing plants of central tuft		
	Chehalis	Sussex	Devizes	Chehalis	Sussex	Devizes
R^2	1.00	0.98	0.80	0.77	0.75	—
a	−0.048	−0.063	−0.74	−0.075	−0.089	—
p-value of **a**	0.03	0.001	0.02	0.12	0.02	—

TABLE 2b. Parameters of a linear regression model applied to the Chehalis, Sussex and Devizes data. R^2 is the coefficient of multiple determination and a is the slope parameter. A simple linear regression fits all the data sets with a higher statistical significance; in the no-tuft case considered by Haselhoff, it fits even better.

We obtained from Haselhoff (Haselhoff, communication to the authors, 2003) the original measurements taken at the Nieuwerkerk man-made formation (Figure 3), and we compared them with those reported in Haselhoff's paper.

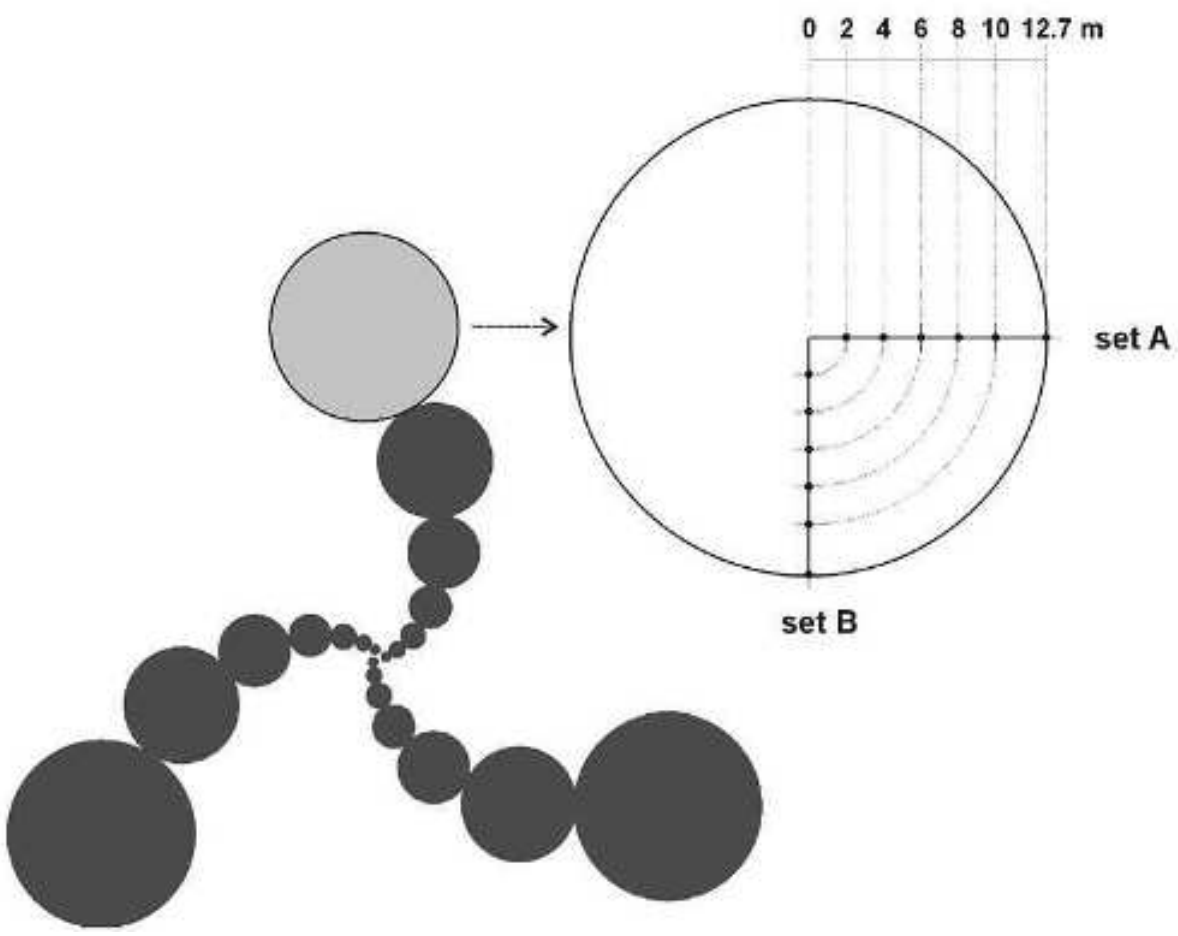


Fig. 3. Schematic representation of the Nieuwerkerk man-made formation. The light grey circle in the formation is the sampled one. On the upright, a zoom of the sampled circle with the indication of the sampling points. Both sets A and B were gathered by Haselhoff, but only set A was published. Set B never appeared in Haselhoff's paper.

First, it should be noted that the node lengths increase up to 30%, proving wrong the conclusions of the Levengood and Talbott experiment at Maryland (1997), in which plant gravitropism was estimated to be no more than about 10%, meanwhile demonstrating that man-made circles can have node elongation as large as those found in the reputedly non-anthropogenic (‘‘genuine’’) formations.

Furthermore, examining the Nieuwerkerk case, we noticed that this time, the first external sample point was excluded by the analysis, though it was located only 10 cm beyond the circle edge (i.e. 12.8 m from the circle centre). Including this sample into the regression analysis, as needed to make a coherent comparison with the analyses carried out on the other ‘‘genuine’’ formations, the correlation coefficient for the BOL model changes from R = 0.54 to R = 0.63.

What was most surprising, however, was the discovery that only a part of the experimental data was published in the article. During the experiment, Haselhoff gathered two sample sets, indicated as A and B, following two orthogonal directions on the same circular imprint, but only set A was published. The correlation coefficient for the BOL model applied to set B is R = 0.71, significantly higher than that of set A.

By using both data sets and averaging the values of the points located inside the circle at the same distance from the centre (Figure 2d), we found that the correlation coefficient for the BOL model increases to R = 0.73. Moreover, including also all the available data belonging to the outer part of the circles and using as control value the average of all the outside samples, the correlation coefficient increases to R = 0.83. We conclude that plants collected at man-made formations can reveal statistical features similar to those of the ‘‘genuine’’ crop circles.

Another point worth noticing is the lack of the analysis of the Beckhampton spiral formation, though this experiment is fully

described in Levengood and Talbott's article, as commented on by Haselhoff. As a matter of fact, the Beckhampton formation does not show a $1/r^2$ trend; its node lengthening does not even seem correlated with distance. We point out that all experiments have to be taken into account and that a theory is reliable only when it explains all cases and not only those that agree with it.

It might be argued that, in order to draw a spiral on the ground, a BOL might have to move in a complex way, instead of just staying still over the centre; this movement would prevent the $1/r^2$ trend from appearing in the data, thus justifying the exclusion from the analysis.

However, this rationale would lead to questioning beyond the scope of the three articles. It is normally accepted by ''believers'' that crop circles are made by intelligent beings, because (allegedly) natural phenomena could not draw such a wide variety of complex geometrical symbolic patterns. However, this compelling evidence is not present in simple round or irregular (nongeometrical) shapes. If an article focuses only on simple circles, its conclusions cannot be extended to complex circles without relying on the implicit, questionable assumption that only one cause of stem bending can ever exist. If an article does not address complex shapes, then its relevance for what people call ''crop circles'' has yet to be demonstrated.

Another crucial criticism concerns the inconsistency of the assumptions. In Levengood and Talbott's article, an intense and rapid heating of the plant tissues is suggested as a consequence of the radiation absorption. The pressure rise, caused by the water heating, should stretch the viscoelastic node tissues, elongating them. In his article, published in 1994, Levengood stated that ''if microwave energy is involved in crop formations, the amount of heating would depend on plant water content''. However, the thermal expansion of liquid water from 15°C to 90°C is no more than 3.5% and can not account for node expansions in the range of 30% to

200%, like those measured in the formations (Levengood & Talbott, 1999).

Furthermore, both Levengood and Talbott (1999) and J. A. Burke (1998), a member of the same research team (BLT), asserted that plant damages (node elongations) of greater magnitude occur within the irregularly outlined crop formations attributed to the wind and/or to severe weather conditions.

All the hypotheses formulated about the circles' creation were based on a thermo-mechanical effect, but the authors never demonstrated the possibility for the stem nodes to lengthen up to 200% or even to 100%, as observed in the ‘‘genuine’’ formations, under heating. It should not be a difficult task to verify whether crop stems indeed elongate under the action of radiant heat (without burning or killing the plants); but as long as this kind of laboratory evidence for the thermo-mechanical effect is not provided, node elongation as great as those allegedly observed for crop formations cannot be related to an electromagnetic radiation absorption.

A further criticism concerns the lack of detailed information in every topic treated in the papers: no photograph is shown of the three ‘‘genuine’’ circles and the Nieuwerkerk ‘‘hoax’’; no table is reported with the original data; no description is provided for the flattening geometry (i.e. nothing is said about the positions of the bent plants); nothing is said about where the samples were collected inside the circles, except for their distances from the centre. Thus, the study does not allow a two-dimensional analysis; no uncertainty is supplied about the abscissa, whereas each point represented the average of the stem length of 10-15 plants and small differences in the distance from the centre produce enormous variations in the stem elongation, as in the case of the Devizes formation, where the second and third points are only 1.9 cm apart, while their elongation differs by 86%. No hypothesis is put forward about the duration, intensity and frequency of the alleged radiation. Finally, the opacity of the plants, involving the incidence angle of the radiation on the stems, can

dramatically change the symmetry of the energy absorption mechanism and so too, the model equation; this factor is totally ignored.

Conclusions

We conclude that the claims about the involvement of some kind of electromagnetic radiation in the creation of crop circles are not supported by the available evidence. In particular, the $1/r^2$ symmetry exists only as a consequence of the unjustified exclusion of unwanted data; even in this favourable condition, the suggested model does not fit the data as well as a simple ‘‘best fit’’ straight line. Even if a $1/r^2$ trend were found, it should not, anyway, be related to a point source radiating the exposed crop field, because this implies a complete transparency of the plants to the striking radiation, so avoiding the absorption of energy. Moreover, the BOL model was selectively applied only to circular imprints, while all other geometric crop formations with rectangular or more complex patterns were deliberately ignored because they cannot fit the BOL hypothesis.

The total evidence discussed in this critical review demonstrates nothing but a mere difference in the stem elongation between the flattened plants lying inside the circles and those standing outside it, as we should expect when whatever kind of mechanical force flattens the plants, rope and wood plank included.

References

Burke, J. A. (1998). The physics of crop formations. *MUFON Journal, October 1998*, 3–7.

Haselhoff, E. H. (2001). Opinions and comments on Levengood WC, Talbott NP (1999). Dispersion of energies in worldwide crop formations. *Physiologia Plantarum Journal, 105*, 615–624; *111*, 123–125.

Levengood, W. C. (1994). Anatomical anomalies in crop formation plants. *Physiologia Plantarum Journal*, *92*, 356–363.

Levengood, W. C. & Talbott, N. P. (1999). Dispersion of energies in worldwide crop formations. *Physiologia Plantarum Journal*, *105*, 615–624.

Meaden, T. (1991). Circles from the sky – A new topic in atmospheric research. In *Circles from the Sky* (pp. 11–12). London: Souvenir Press Ltd.

Pewsey White Horse, Wiltshire, 17 July 2002. Copyright: Andrea Feliziani.

2. Haselhoff's reaction

This reaction is also published online at www.cicap.org/crops/en/011.htm.

Reaction on the article by Francesco Grassi et al. (June 2005) by Eltjo Haselhoff, PhD, Dutch Centre for Crop Circle Studies, dcccs@planet.nl.

Summary

This article is a rapid reaction on a paper recently published by Francesco Grassi et al., of the Italian Skeptics organisation CICAP. In this paper Grassi raises many points of concern with respect to three earlier scientific publications, one of which written by myself. Most, if not all of Grassi's points of concern on my publication are irrelevant or erroneous. Some of his comments would have been valid in case my paper had been a full-length article, which it was clearly not. Grassi's arguments about statistic relevance had already been mentioned in my own conclusions and can hence not be used as a point of criticism. His accusation that I should have withheld data to manipulate statistics is not valid. In fact, due to poor communication, Grassi has used 'garbage' data for his own analysis, which has consequently no value at all. Finally, I believe the bombastic and denigrating style of Grassi's publication is beyond proportion.

Grassi's paper [1] is a comment on three other scientific publications, two of which were written by members of the BLT research team [2], and one of which was written by myself [3]. While reading Grassi's article, I found several apparent misinterpretations with respect to the BLT work, but I will refrain from comments, as the original authors are the appropriate party to comment here. I will only consider Grassi's comments on my own work.

[1] Balls of light: The Questionable Science of Crop Circles, Journal of Scientific Exploration, Vol. 19, No. 2, pp. 159-170, 2005.

[2] Levengood, W. C. (1994). Anatomical anomalies in crop formation plants. Physiologia Plantarum Journal, 92, 356-363, and Levengood, W. C. & Talbott, N. P. (1999). Dispersion of energies in worldwide crop formations, Physiologia Plantarum Journal, 105, 615-624.

[3] Haselhoff, E. H. (2001). Opinions and comments on Levengood WC, Talbott NP (1999). Dispersion of energies in worldwide crop formations. Physiologia Plantarum Journal, 105, 615-624; 111, 123-125.

I was surprised to see that a comment on earlier publications was not published by the same journal that presented the original papers, in this case *Physiologia Plantarum*. This is unusual for scientific communications, and it is fair to assume that if the paper by Grassi et al. would have been a relevant comment, the editors of *Physiologia Plantarum* would not have rejected it. Although Grassi does provide an explanation for the fact that *Physiologia Plantarum* rejected his paper - which, by the way, is a very uncommon subject of discussion in a scientific communication - his statements are curious and are currently under investigation.

Basically, Grassi's criticism on my publication is fourfold:

a. Important aspects in the presented physical model are omitted (such as radiation absorption by the air and the radiation's angle of incidence on the stem nodes);

b. The analysis is based on an insufficient number of measurements, so that the findings lack statistical relevance;

c. There is a lack of detailed information (e.g., Grassi requests *'tables with original data'*);

d. I deliberately held back measured data in order to manipulate the statistics.

Before I will address - and reject - these four claims, one fact needs to be emphasized. An important part of Grassi's analysis is based on extensive field- and laboratory work performed by myself. In the year 2003, Grassi approached me by means of several very kind and polite e-mails, calling himself a *'crop circle researcher'*, and asking me if he could get the raw measurement data that I had collected from a set of crop circles (Nieuwerkerk, 1996). After I had sent these to him, no further communications about these data, nor about my related work has taken place. (I will not be offended by the fact that Grassi neglected to acknowledge me in his paper, which would not only have been a matter of courtesy, but is also quite common in scientific communications.)

I will now briefly comment on Grassi's four main points of concern:

a. Important aspects in the presented physical model are omitted

This statement, along with several other points of concern addressed by Grassi throughout his paper, would have been appropriate if my paper had been a full-length article, presenting original work. However, my paper clearly was a *comment* on one of the BLT papers, and hence, not a self-contained publication of original research. The issues Grassi raises, including the one mentioned above, were implicitly addressed in my conclusion, when I stated that the commented paper *'stimulates further study'*. I therefore reject Grassi's criticism, as comments on other scientific publications need to be focused and concise.

b. The findings lack statistical relevance

At the end of my paper I concluded that *'much more data would have to be analyzed and thorough statistical studies will be necessary"*. It is therefore curious to see that Grassi uses my own arguments against me. He simply repeats my own conclusions, which can never be a critical note, despite the fact that Grassi presents it as such, and even in a denigrating manner. I do agree with Grassi's statement, but I reject it as a point of criticism on my work.

c. There is a lack of detailed information and tables with original data should have been provided

This point of criticism is curious, as I have provided Grassi with all the original data that I had available. Moreover, anyone with just a little experience in scientific communication knows that publication of tables with original data is not only unusual, it is even against the guidelines of basically all scientific journals. Original data are found in log books or computer spread sheets, and should be available upon request, but they are not published in scientific communications. This is what I was taught in the first year of University, and for good reasons: otherwise my paper would have been twenty pages long in stead of two, and consist mainly of numbers. I therefore reject this point of criticism too.

d. I deliberately held back measured data in order to manipulate the statistics

This is more a severe accusation of fraud rather than a point of criticism. Grassi writes that, after he received the digital spreadsheet with raw data from me, he 'discovered' measurements that I had not published, and which, when included in his analysis, would significantly change the outcome of my findings. However, the reason for omitting the data in my analysis was simple: due to an unfortunate incident several of the samples in this series had been mixed up even before the measurements were made. Although I had re-ordered the samples to the best of my knowledge, this event rendered any correlation analysis worthless, including much of the

work performed by Grassi and presented in his paper. All of his related findings and conclusions are therefore worthless as well. Interestingly, a simple e-mail would have prevented him and his coworkers from wasting valuable time.

At this point I should add that Grassi's requests for *'more evidence'* had already been addressed. This is still the focus of my personal crop circle activities today. One particular case (Hoeven 1999), had already been worked out in detail and published in my latest book [4], which is in Grassi's possession and formed the basis of his studies. Grassi also requested the raw data of this formation, however, I did not have these readily available. Since then, November 2003, I did not hear from Grassi anymore. However, besides the detailed information in my book, Grassi was also aware of the extensive report about this case that had been published long ago (1999) on the internet [5], including raw data [6]. This study discusses a case of a crop circle that fits the BOL hypothesis with very high statistical relevance, and hence is in conflict with Grassi's main conclusion that *"involvement of some kind of electromagnetic radiation ... is not supported by the available evidence".* One can only speculate why Grassi decided no to include these data in his analysis.

[4] *The Deepening Complexity of Crop Circles*, see: www.deepeningcomplexity.com.

[5] archiv.fgk.org/99/Berichte/Hoeven99/index.shtml.

[6] www.dcccs.org/sample.htm.

Finally, I would like to express my astonishment about the bombastic and denigrating style of Grassi's paper, in which he pretends to debunk a sensational claim. Anyone who reads my paper will agree that this was a mere comment to the work of the BLT team, suggesting some model adaptations and carrying ahead their hypotheses with a modified version, only to stimulate further study. In my opinion the style of Grassi's comment, as well as the propaganda related to it that he currently carries out over the internet and beyond

is way out of proportion, and casts a dark shadow over his true intentions.

Conclusion

Normally, authors of scientific communications are asked for comment before their work is criticized. This is not just a matter of courtesy, but it also avoids precious time being wasted. Any serious researcher would take the time to verify if there is some fact they have overlooked or possibly misunderstood before they rush to publications and press releases. I can only conclude that Mr Grassi has little or no experience in scientific communication. Open and honest correspondence, initiated by Mr Grassi and co-authors would have saved myself, them, as well as the editors of *Physiologia Plantarum* and the *Journal of Scientific Exploration* much unnecessary work. I do appreciate efforts that are dedicated to the pursuit of knowledge. However, I can't help suspecting from the course of matters that Mr Grassi was more dedicated towards disgracing me and my work rather than to performing honest and sound research.

This article is intended for the general public and may be copied and distributed freely. I will consider writing a formal reaction, together with the authors of the other two articles, to the *Journal of Scientific Exploration*. In such a reaction I would address all of Grassi's points of concern one by one, in more detail. However, as it has become clear to me that Grassi and coworkers have no or little interest in an honest and constructive scientific discussion, and too much time and energy has already been wasted in my opinion, I may decide to spend my time on more useful activities.

Barbury Castle, Wiltshire, 28 July 2003. Copyright: Andrea Feliziani.

3. Grassi et al.’s reply

This reply is also published online at www.cicap.org/crops/en/012.htm.

Grassi et al. reply to the internet rapid reaction by Eltjo Haselhoff on the *JSE* article (July 2006).

by Francesco Grassi, Claudio Cocheo, Paolo Russo

Soon after the publication of our paper on the *Journal of Scientific Exploration*, Dr. Eltjo Haselhoff, one of the authors of the articles we criticized, wrote a short reply text, just a "rapid reaction", as he defined it. He added:

> "I will consider writing a formal reaction, together with the authors of the other two articles [...] However, as it has become clear to me that Grassi and coworkers have no or little interest in an honest and constructive scientific discussion, and too much time and energy has already been wasted in my opinion, I may decide to spend my time on more useful activities."

That is exactly what he seems to have decided, since a year has passed and Haselhoff recently confirmed that he has not written any formal reaction yet. We were waiting for it before replying, but now we feel we have waited long enough. This article examines all of the points Haselhoff made in his reply text. Since a long time has passed, it may be useful to quote most of Haselhoff’s text.

> "I was surprised to see that a comment on earlier publications was not published by the same journal that presented the original papers, in this case *Physiologia Plantarum*. This is unusual for scientific communications, and it is fair to assume that if the paper by Grassi et al. would have been a relevant comment, the editors of *Physiologia Plantarum* would not have rejected it. Although Grassi does provide an explanation for the fact that *Physiologia*

> *Plantarum* rejected his paper - which, by the way, is a very uncommon subject of discussion in a scientific communication - his statements are curious and are currently under investigation."

We confirm it is a very uncommon subject, but the reason why we had to include it in our paper is clearly shown in the previous quote: to avoid "fair assumptions" such as Haselhoff's about the relevance of our paper. We are also confident that Haselhoff has had enough time to investigate our statements in depth.

> "Basically, Grassi's criticism on my publication is fourfold: [...]"

This is a serious misrepresentation of our criticism. Our paper raises many more issues than the four ones mentioned by Haselhoff. Just to list a few: the Beckhampton formation is not analyzed and does not fit the model, the assumption about thermal expansion of water is physically inconsistent, the thermal mechanism could and should have been tested and was not, the criterion for inclusion of samples in the control group is not defined, central tufts have been excluded, the assumption about "normal" node elongation is contradicted by the Nieuwerkerk man-made circle... it would be pointless to summarize the whole article here. (Many of these problems are already present in the papers by Levengood and Talbott which Haselhoff's paper develops from, but nonetheless they do affect Haselhoff's paper just as well, as pointed out in our paper.) Of course Haselhoff is free to avoid commenting these points, but should not negate their existence in our paper, nor hide them behind the word *"basically"*.

Then Haselhoff tries to reject the *"four"* points he claims we made.

> "Before I will address - and reject - these four claims, one fact needs to be emphasized. An important part of Grassi's analysis is based on extensive field- and laboratory work performed by myself."

A significant part of our analysis is a criticism to that work, so it is just obvious that that part is based on it.

> "In the year 2003, Grassi approached me by means of several very kind and polite e-mails, calling himself a ‘crop circle researcher’, and asking me if he could get the raw measurement data that I had collected from a set of crop circles (Nieuwerkerk, 1996). After I had sent these to him, no further communications about these data, nor about my related work has taken place."

Much more than that actually happened (see later).

> "(I will not be offended by the fact that Grassi neglected to acknowledge me in his paper, which would not only have been a matter of courtesy, but is also quite common in scientific communications.)"

We are glad to know that he was not offended. We avoided acknowledging him, as would have been normal in different circumstances, because our criticism was not mild. There are cultures, such as Italian, where acknowledging somebody for having contributed to an analysis that wipes out his own conclusions would not sound courteous, but ironic, maybe even offensive. We definitely did not want that.

> "I will now briefly comment on Grassi’s four main points of concern:
>
> **a. Important aspects in the presented physical model are omitted**
>
> This statement, along with several other points of concern addressed by Grassi throughout his paper, would have been appropriate if my paper had been a full length article, presenting original work. However, my paper clearly was a comment on one of the BLT papers, and hence, not a self-contained publication of original research. The issues Grassi raises, including the one mentioned above, were implicitly addressed in my conclusion, when I stated that the commented paper ‘stimulates further study’. I therefore reject Grassi’s criticism, as comments on other scientific publications need to be focused and concise."

Comments should be focused and concise because they should be really just comments to other people’s work. That is why they are usually not even peer-reviewed. Haselhoff’s "comment" is very unusual: the first part does comment a BLT paper, showing a couple of errors in the analysis of data; if only the "comment" ended there, it would be perfect. But then it goes on with original work: a new hypothesis with a new model (BOL), new data (Nieuwerkerk), new

calculations, new conclusions. Such things should have never been written as a "comment" in the first place. Comments are a precious resource for quickly highlighting and correcting defects of scientific papers; they are not intended as a way to publish short papers quickly, possibly bypassing the peer review process.

We might have criticized Haselhoff's improper use of "comments" in our JSE paper. We did not, since we were - and are - more interested in what he wrote than in how he published it. But science is science, and there is only one way to make it: correctly. There is just no place in science for extraordinary claims based on inadequate models, insufficient data and improper calculations. If Haselhoff thinks he has found such a place in "comments", he should better think again of what science is.

With regard to that *"implicitly addressed in my conclusions"*, see the next point.

> "**b. The findings lack statistical relevance**
>
> At the end of my paper I concluded that 'much more data would have to be analyzed and thorough statistical studies will be necessary...' It is therefore curious to see that Grassi uses my own arguments against me. He simply repeats my own conclusions, which can never be a critical note, despite the fact that Grassi presents it as such, and even in a denigrating manner. I do agree with Grassi's statement, but I reject it as a point of criticism on my work."

No, we did not repeat Haselhoff's conclusions. When the results of any scientific study lack statistical relevance, the study's outcome is considered "negative". In other words, scientifically speaking, "the findings lack statistical relevance" actually means "there are no findings". Haselhoff never concluded that, of course. On the contrary, he wrote *"The experimental data [...] suggest that pulvinus length expansion in crop circles is a thermo-mechanic effect, possibly induced by a kind of electromagnetic point source. Data obtained from a simple hand-made formation did not reveal the same characteristics."* So Haselhoff claims he did find something: statistical characteristics, suggesting a physical phenomenon. He

also added: *"[...] the position-dependent pulvinus length, and in particular the apparent organized character of the data analysed, is interesting and stimulates further study."* Again, he writes about characteristics found in the data by his statistical analysis and deserving further study. A statistical analysis can be said to have found something only when the result is statistically significant.

Haselhoff's self-quoting from his conclusions is too short to appreciate the meaning of the original sentence. The full quote is: *"By no means does the author pretend to present a 'lithmus test' for distinction between a 'genuine' crop formation, whatever it may be, and a hand-flattened area of crop. Much more data would have to be analyzed and thorough statistical studies will be necessary before such a criterion can be defined."* So Haselhoff just claims that his findings are not so universal to be used as a 'genuinity' test for all crop circles - not yet, at least. Therefore, although Haselhoff's conclusions are indeed a bit vague and allow some room for interpretations, this room is not unlimited. He never concluded that he identified no evidence at all for the BOL hypothesis. He never concluded that he found nothing; nobody ever does. If you think that you found nothing, you do not write a paper, nor a comment, nor anything else, unless you do want to make clear that the result of your study was negative: you looked for something that seems not to exist and you want to publish this negative evidence. Nowhere in Haselhoff's conclusions can such a negative admission be found.

Just as an ending note, we are surprised by the striking contrast between Haselhoff's recent minimization of his own work (just a comment, just a stimulus for further research, never meant to be anything else) and the bombastic way he presents it in his book (*The Deepening Complexity of Crop Circles*, see www.deepeningcomplexity.com): *"[...] all linear regression coefficients had values close to 1, which is a significant proof for demonstrating that a point-like electromagnetic source had caused the swelling of nodes. [...] These discoveries were presented to a scientific journal [...] The fact that my article was published is rather*

important, as it strengthens the hypothesis that "balls of light" are directly involved in the creation of crop formations (or at least some of them). This is not a mere hypothesis any more, but an accepted and scientifically proven fact and it will continue being so until somebody else will offer a different explanation [...] or will demonstrate that the analysis was wrong." (our translation from the Italian edition, pg. 89-90; text highlighting is our too).

This quote may be useful to clear any reasonable doubt on what Haselhoff meant in his paper's conclusions, although he now seems to have changed his mind. We welcome this evolution of his official position, which we consider a positive effect of our work, but we reject any redefinition of his previous position: the past cannot be rewritten. By the way, in that quote Haselhoff considers the possibility that somebody may demonstrate that his analysis was wrong; he looks very open to criticism, as any researcher should be. However, we think we did supply the demonstration he was asking for, but now Haselhoff seems rather unwilling to accept it.

> "**c. There is a lack of detailed information and tables with original data should have been provided**
>
> This point of criticism is curious, as I have provided Grassi with all the original data that I had available."

Curiously, most data we requested have always been unavailable. We asked Haselhoff for the data of all formations he analyzed: Devizes, Chehalis, Sussex (sampled by BLT), Nieuwerkerk and Hoeven (sampled by Haselhoff). Although we had been assured that we would have received all of them, we received only the Nieuwerkerk data. In all other cases we had to work with data which had been read back from the graphs.

> "Moreover, anyone with just a little experience in scientific communication knows that publication of tables with original data is not only unusual, it is even against the guidelines of basically all scientific journals. Original data are found in log books or computer spread sheets, and should be available upon request, but they are not published in scientific communications. This is what I was taught in the first year of University, and for good reasons: otherwise my

> paper would have been twenty pages long in stead of two, and consist mainly of numbers. I therefore reject this point of criticism too."

We are surprised that Haselhoff did not understand our point. We did supply three data tables in our paper; all together, they barely filled a page of the *Journal of Scientific Exploration*, and would fill less than half a page in *Physiologia Plantarum*, whose pages are denser. Of course the tables just contained the samples averages, not the single values and even if the averages should be sufficient to reproduce and verify the regressions, they are absolutely inadequate to provide information about the uncertainty on the x-axis; this information too should have been provided in Haselhoff's and BLT's papers. On the contrary, no data table was present.

Reproducibility can never be an afterthought in science: it is its key feature. Without tables, anybody willing to verify the analysis should either get the data from the graphs by hand with ruler and square, slowly, with limited precision, or ask the author for the data and wait and hope. Both options are rather slow and uncomfortable and discourage verification; we would not be surprised if we happened to be first in verifying Haselhoff's analysis. Not providing data tables is not always a serious fault, but is seldom a good choice when tables are small; in a paper advancing extraordinary hypotheses on the basis of just a few samples, it is an incomprehensible and questionable choice at least.

Moreover, we questioned the lack of other kinds of information. For example, the shapes of the formations were not shown.

> "**d. I deliberately held back measured data in order to manipulate the statistics**
>
> This is more a severe accusation of fraud rather than a point of criticism. Grassi writes that, after he received the digital spreadsheet with raw data from me, he 'discovered' measurements that I had not published, and which, when included in his analysis, would significantly change the outcome of my findings."

Of course we never accused anybody of fraud; we just cannot imagine a fraudulent researcher who e-mails the proof of his deed to somebody requesting it. We thought that was obvious. We just noticed that something was wrong from the point of view of scientific methodology (in normal life you may decide not to use all the information you have at your disposal, in science you have no such freedom), but we had already noticed other instances of that same kind of error in Haselhoff's work, so we were ready to accept that final surprise.

> "However, the reason for omitting the data in my analysis was simple: due to an unfortunate incident several of the samples in this series had been mixed up even before the measurements were made. Although I had re-ordered the samples to the best of my knowledge, this event rendered any correlation analysis worthless, including much of the work performed by Grassi and presented in his paper. All of his related findings and conclusions are therefore worthless as well. Interestingly, a simple e-mail would have prevented him and his coworkers from wasting valuable time."

Interestingly, we did send that e-mail. Here is a brief summary of what happened.

When we began our enquiry, we not only read the BLT papers and Haselhoff's paper, but Haselhoff's famous book too.

The paper mentioned the analysis of a man-made circle: "Nieuwerkerk, 1997".

The book mentioned the analysis of a man-made circle: "Dreischor, 1997".

The corresponding graphs were *completely different*.

However, a little investigation showed that they were actually the same circle. We suspected that, because Haselhoff already did something similar with the other formation he examined, named "Hoeven" in a web page and "Noord-Badant" in his book. We shall not discuss here the possible reasons for this strange and misleading habit.

At this point we thought there was something wrong with the graphs. This is one of the reasons why we privately asked Haselhoff for the Dreischor-Nieuwerkerk data. This is a short excerpt from Grassi's first e-mail to Haselhoff:

> "As per the Nieuwerkerk formation, from the paper appears that you personally sampled only 6 points, but the values reported in a graph in your book are different.
>
> Did you sample other points in the Nieuwerkerk formation?
>
> Is it easy for you to send me also the complete electronic data you have gathered at Nieuwerkerk?"

Haselhoff replied with an e-mail with a data file attached. The text of the e-mail quoted that excerpt, so it is safe to assume that Haselhoff read it, but after the quote he just replied to look at the attached file. So we did.

When we saw that the file contained two distinct data sets, it became evident that Haselhoff had used set A in the paper and set B in the book. A closer inspection revealed that he had also adopted two different values for the control level, although he collected only one group of control samples; while the paper correctly used the average of all control samples, the book incorrectly used only part of them. Thanks to this data selection, the node lengthening plotted in the book's graph is lower than it should, so leading to an underestimation of the natural node lengthening and favoring the BOL hypothesis: one of the samples is even attributed a *negative* lengthening. That lone sample under the zero level is just one of the features that make the two graphs easily distinguishable at a first glance.

We just thought we were facing two data selections, a kind of scientific mistake that we already found in other parts of Haselhoff's paper (central tufts, Beckhampton) and his Hoeven report (see later). Nothing new. Why should we have suspected that set B was bad, since Haselhoff published it in his book?

On the contrary, Haselhoff's explanation really surprises us. An unfortunate incident may happen, we have no problem with that; it is the overall chain of unlikely events implied by that explanation that we find astonishing:

1) An unfortunate incident mixed up the data, trashing set B.

2) Haselhoff made a mistake and published the graph of set B in his book. A mistake is the justification he supplied when asked in the Italian newsgroup it.discussioni.misteri: *tinyurl.com/lesod*. It seems he wanted to publish set A in the book, but he happened to publish set B instead.

3) He made another mistake in the same graph: he somehow replaced the original control level with a badly recomputed one.

4) During the whole process of preparing the graph, placing it in the page, adjusting colors and dimensions, checking the final print quality, taking care of the many translations and editions of the book, he never realized that the graph was completely wrong. He never spotted the sub-zero outlier. Just a cursory glance at the graph would have probably detected it.

5) After he spent lots of time and efforts collecting and analyzing data and an incident ruined half of his work, he just forgot to mention this detail when he sent us the data. This is another mistake that most people would find very hard to make.

6) We did point at the graph mismatch in our first e-mail and he quoted it. He did not take any corrective action. He reacted to the question asked in it.discussioni.ufo as he had never been told before. It seems he did not take what we wrote - and he read - into any consideration: yet another mistake.

We leave any judgement on this long chain to the reader. Apart from the astonishing mix of misfortune and lack of care that would be

necessary to cause all that, it should be exceedingly clear that if somebody made a mistake it was definitely not us.

Haselhoff seems to think that this "mistake" invalidates our paper's conclusions, but anybody accepting his explanation should notice that his implication is not correct: only a small part of our work was about the man-made Nieuwerkerk formation, so small in fact that we did not even care to mention it explicitly in our conclusions. In particular, our sentence "the $1/r^2$ symmetry exists only as a consequence of the unjustified exclusion of unwanted data" mostly refers to other data exclusions, that Haselhoff has not commented: the central tufts of the Chehalis and Sussex formations and the entire Beckhampton formation.

> "At this point I should add that Grassi's requests for *'more evidence'* had already been addressed. This is still the focus of my personal crop circle activities today. One particular case (Hoeven 1999), had already been worked out in detail and published in my latest book, which is in Grassi's possession and formed the basis of his studies."

We confirm we studied the Hoeven case too.

> "Grassi also requested the raw data of this formation, however, I did not have these readily available. Since then, November 2003, I did not hear from Grassi anymore."

That is a very reductive view.

April 2003: Grassi sends his first message, qualifying himself as a crop circles researcher, correctly making clear he is going to verify Haselhoff's claims and asking for all data analyzed in the paper. He receives just an automatic reply; Haselhoff is temporarily unreachable.

May 2003: Grassi tries again. Haselhoff sends the Dreischor data and adds that he will send the data of Devizes, Chehalis, Sussex **and Hoeven too**, as soon as he will be able to retrieve them (!).

November 2003: Grassi asks again. Haselhoff could not yet retrieve the data (!), but ensures he will try.

February 2004: one of us (Russo), who got a particular interest in the Hoeven case, decides to make one last attempt to get the data. His e-mail makes clear that he is requesting the data in order to verify Haselhoff's analysis. He receives no reply.

> "However, besides the detailed information in my book, Grassi was also aware of the extensive report about this case that had been published long ago (1999) on the internet [8], including raw data [9]."
>
> [8] http://archiv.fgk.org/99/Berichte/Hoeven99/index.shtml
>
> [9] http://www.dcccs.org/sample.htm [currently not on-line any more]

We would have never asked Haselhoff for the Hoeven data, nor would he have been unable to send them to us, if they had already been put online. Of course they were not; the Hoeven data consist of sets A, B, C, D, E, F, G, Co (Haselhoff's Hoeven report *[linked above]* contains their graphs, without numerical values); only one raw set *[linked above]* was ever put online (much later), in a really raw form (images of stems, not measured node lengths). A single set is valueless for a correct analysis. Haselhoff's web page does not specify which set he put online, but a quick comparison with the graphs in the report reveals it is set B.

> "This study discusses a case of a crop circle that fits the BOL hypothesis with very high statistical relevance, and hence is in conflict with Grassi's main conclusion that "involvement of some kind of electromagnetic radiation … is not supported by the available evidence". "

Among all Hoeven data sets, only set B matches the BOL model quite well and it is evident that this is the reason why it was chosen for publication online. It is actually deeply incorrect to single out that set from the data for any statistical analysis: it is just another data selection error. We verified Haselhoff's analysis of the Hoeven formation; the results can be found in the article linked here: English, Italian. Briefly: Haselhoff's analysis is affected by some errors

(mostly data selections); the corrected results show no reasonable evidence for BOLs.

> "One can only speculate why Grassi decided no to include these data in his analysis."

It would have been the wrong place. The Hoeven report had never been published in a scientific journal, so there was no need to criticize it in a scientific journal. We felt that if we did, we might have implicitly credited the report with a scientific status it did not deserve. Moreover, our paper was already pretty long. So we published our analysis of the Hoeven case in the magazine of CICAP, *Scienza & Paranormale* (S&P N. 63 - Year XIII - Sep/Oct 2005), and put it online too.

> "Finally, I would like to express my astonishment about the bombastic and denigrating style of Grassi's paper, in which he pretends to debunk a sensational claim. Anyone who reads my paper will agree that this was a mere comment to the work of the BLT team, suggesting some model adaptations and carrying ahead their hypotheses with a modified version, only to stimulate further study."

We have already commented Haselhoff's recent just-a-comment position, but an additional remark may be useful here. Haselhoff seems to think that we should not have criticized his paper because it is *"a mere comment"*. Scientifically speaking, there is a precise difference between a peer-reviewed paper and a simple comment. A comment is the expression of the opinion (opinion, not science) of somebody about the work carried out by somebody else, with the bonds imposed by the editorial board of the review only (and no checking by the scientific board). Moreover, while a comment should enjoy the advantage of being not scientifically criticizable, as an expression of the free thinking of someone, at the same time it should not pretend to scientifically prove anything but a subjective personal thinking.

We already remarked that Haselhoff's "comment" is not a mere comment at all, since it contains new hypotheses, data, calculations

and conclusions, just like a full paper, and so it is also susceptible of technical criticisms, as we did. But even if we accepted - and we do not - Haselhoff's opinion that his work should not be commented at all because it is - formally - not a full paper, he would run into another problem. We have just criticized Haselhoff's claim that his Hoeven report supplies the scientific evidence that was missing from his paper, but apart from our criticism, the Hoeven report has never been published in any scientific journal, not even as a comment. Coherently with his recent view that nothing less than a formal peer-reviewed full paper should ever be considered as an attempt to scientifically prove anything, he should have never mentioned his Hoeven report as a source of scientific evidence in the first place.

> "In my opinion the style of Grassi's comment, as well as the propaganda related to it that he currently carries out over the internet and beyond is way out of proportion, and casts a dark shadow over his true intentions."

Propaganda? It is not us who perform data selections. We analyze available information and publish the results. We are interested only in claims on the paranormal and in facts that should back them. Therefore, we will not comment Haselhoff's style nor draw any conclusion about his true intentions (although readers may do): that is definitely beyond our interests.

Haselhoff's "comment" paper highlights a couple of very serious errors in the BLT paper it refers too, actually invalidating its conclusions. This is a serious criticism, however presented. Any researcher has the scientific right to criticize anybody else's work. Any serious researcher knows that rule; science would never work otherwise. The primary reason why a scientist must be so careful on his work is that he knows all too well that if he makes mistakes, somebody else will find them. Haselhoff was just in his right when he pointed out BLT's errors; so were we.

Moreover, we ourselves directly invited Haselhoff, and Levengood & Talbott on behalf of Haselhoff, to write an official reply and to submit it to JSE journal. We were not satisfied by the "rapid reaction"

published by Haselhoff on the DCCCS website, because it was not a true scientific criticism but a simple opinion. We waited till now, expecting a scientific publication from both Haselhoff and Levengood & Talbott that deeply and with well founded reasons criticizes our article on the JSE.

We are not closed to any scientific criticism on our work, that obviously is at disposal of anyone who would like to investigate it. So far we have had no reply.

> "**Conclusion**
>
> Normally, authors of scientific communications are asked for comment before their work is criticized. This is not just a matter of courtesy, but it also avoids precious time being wasted. Any serious researcher would take the time to verify if there is some fact they have overlooked or possibly misunderstood before they rush to publications and press releases. I can only conclude that Mr Grassi has little or no experience in scientific communication. Open and honest correspondence, initiated by Mr Grassi and co-authors would have saved myself, them, as well as the editors of *Physiologia Plantarum* and the *Journal of Scientific Exploration* much unnecessary work. I do appreciate efforts that are dedicated to the pursuit of knowledge. However, I can't help suspecting from the course of matters that Mr Grassi was more dedicated towards disgracing me and my work rather than to performing honest and sound research."

Haselhoff's point would have some value if our paper had really been just a waste of time, i.e. if all points made in it had turned out to be groundless. On the contrary, all of our conclusions still hold. About the Nieuwerkerk data: not even the incident hypothesis would turn our work on this single point into a waste of time. At least, it would have lead to the identification of an error whose existence had never been acknowledged before, i.e. that the data set published in Haselhoff's book was completely wrong.

We did take the time to verify our analysis as deeply as possible. There is a reason why our paper has three authors: we discussed every single point to great lengths. We also asked several other experts for their opinions. This process took a lot of time, but it was well spent. The only waste of time we met during this study was the

hopeless wait for most of the data we asked Haselhoff for. However, on two occasions (Grassi, April 2003; Russo, February 2004) we did try to discuss obscure points of his work with him, with no results. We just gave up.

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They all are members of the CICAP Study Team on Crop Circles.

Beckhampton, Wiltshire, 24 July 2001. This formation was made in three hours at night by Matthew Williams and his associates to test whether human circlemakers could create a complex design. More details: francescograssi.blogspot.it/2009/08/cerchi-nel-grano-beckhampton-2001-e-il.html. Copyright: Andrea Feliziani.

4. Haselhoff's letter to the JSE

This letter was published in Issue 21.3 (October 2007) of the Journal of Scientific Exploration *and is also available at www.cicap.org/new/articolo.php?id=273371.*

More About Crop Circles

The following exchange about an article previously published in the *Journal of Scientific Exploration* exceeds in length our guidelines for letters, and to some extent our guidelines as to precise focus on specific points. However, we felt obliged to allow Haselhoff to have his say after our publication of a piece that had criticized some of his writings.

That earlier piece we had published, as noted at the time, because the journal that had disseminated the work being commented on had refused to accept this commentary – in retrospect, it regretted having given any space at all to the matter of crop circles. The *Journal of Scientific Exploration*, of course, is open precisely to topics excluded from venues of orthodoxy, and we also believe that a journal that has published something should permit at least one dissenting critique.

However, we will call a halt at this stage to the present to-and-fro. Any future submissions on the question of crop circles will need to be full manuscripts, and will be reviewed under our customary stringency as to focus, presented evidence, statistical inference, and logical discussion.

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Haselhoff Responds to "Balls of Light: The Questionable Science of Crop Circles"

I would like to comment on a paper in your Journal (Grassi, Cocheo, & Russo, 2005) that criticizes three other papers, two of which were written by the BLT Research Group (Levengood 1994; Levengood & Talbott, 1999) and one was written by myself (Haselhoff, 2001). The analysis by Grassi by Grassi *et al.* contains several serious mistakes, which renders most of their conclusions invalid.

First, Grassi *et al.* criticize the simplicity and question the physical validity of the balls of light (BOL) model as suggested in my comment (Haselhoff, 2001). They require explicit inclusion of mechanisms such as cumulative energy absorption, effects of moisture, reflection, spectral distribution, and the incident angle of the alleged radiation source. Although these suggestions are valid recommendations for future research, I believe they cannot be taken seriously as 576 Letters to the Editor a point of criticism of my comment, which was merely suggesting a modification of the interpretations by the BLT Research Group. The modified interpretation matches an apparently genuine physical counterpart, namely, the ‘‘ balls of light ’’ that have been witnessed and filmed in and around several crop formations. Moreover, the suggestions for extension of the BOL model made by Grassi *et al.* are not realistic because the results published by BLT (Levengood & Talbott, 1999) are not based on laboratory experiments, performed in a controlled environment, but on an analysis of circumstantial evidence, in the form of an apparent leftover of a largely unknown process. With the currently available data, the implementation of an advanced physical

model like Grassi *et al.* suggest will only raise more questions than it could ever answer.

Next, Grassi *et al.* (2005: p. 163) go into some depth with respect to what they call a ‘‘questionable sampling strategy’’. It is unfortunate that they neglect to make a clear distinction between the fieldwork performed by BLT versus the additional verifications by myself (carried out using the same field protocols). The concerns that Grassi *et al.* raise with respect to the choice of controls, the inclusion or exclusion of standing stems in the analyses, etc., are all results of a profound misunderstanding of the work by BLT. Grassi *et al.* (2005: p. 165) demonstrate this at several points in their paper, e.g., when they state that ‘‘No statistical tests have been performed to compare means and variances’’, while this is a standard procedure for all work carried out by BLT. Moreover, it was also clearly stated by BLT in their papers that standard t-tests were performed, and that all results obeyed the common $p < 0.05$ criteria. Grassi *et al.* (2005: p. 166) demonstrate their poor understanding of these matters in their Tables 2a and 2b. These tables are used to question the statistical validity and the physical meaning of the BOL model, based on a calculation of *p*-values. First of all, the *p*-values published in Table 2a for the height parameter *h* are not the values for *h*, but for h^2. It is easy to understand that the *p*-values for h^2 are considerably higher. Much worse, however, is that all *p*-values published by Grassi *et al.* correspond to the case of *single node length measurements*, i.e., the measurement of single nodes at various positions in the field ($N = 1$). This, of course, was not the case, and Grassi *et al.* even report themselves that all node lengths used in the analysis by BLT were *average values* of 15–20 nodes for each position in the field, whereas—as explicitly reported by BLT in their papers—all variations in node length were in fact statistically significant. The fact that Grassi *et al.* clearly failed to recognize this, renders their entire statistical analysis invalid, along with most of the conclusions in their paper.

The crux of the work presented by BLT was the discovery that node lengths in a field with crop formations sometimes show statistically significant ($p < 0.05$) variations, geometrically correlated to the imprints in the fields, both in flattened and in standing crop. This remains an interesting finding, which I still believe requires further study. However, this essential fact was clearly not understood by Grassi *et al.*

Also some remarks must be made with regard to the analysis by Grassi *et al.* of the Nieuwerkerk formation. Their findings are exclusively based on raw data, which I sent to them at their request. The spreadsheet only contained raw numbers with a minimum of explanations, but despite the fact that we later communicated several times, Grassi *et al.* never discussed the interpretation of my data with me until *after* the press release announcing their publication. As a result, some unfortunate mistakes have been made. For example, the positions of the control samples that Grassi *et al.* assumed, and used in their analysis, were all wrong. A more relevant point of concern is related to the alternative outcome for the correlation coefficient, as presented by Grassi *et al.*, by using the average values of corresponding samples in two different radial sample sets. This is not allowed because such an approach would require the explicit assumption of circular symmetry of the node length distribution in the crop circle. Obviously, such an assumption cannot be made *a priori* because this is exactly the issue that the BOL analysis should investigate. Subsequently, the authors also include the samples outside the flattened area in their analysis despite the fact that these had already been used for the determination of the control value (Grassi, 2006). In this way they manage to increase the correlation coefficient to $R^2 = 0.699$, and they conclude that the man-made formation reveals characteristics of a ‘‘genuine’’ crop circle. However, the inclusion of the extra data does not at all demonstrate a better fit to the BOL model despite the (moderate) increase of the correlation coefficient. This can be seen in Figure 1, where the data points added by Grassi *et al.* are shown as open dots. Two of the added data points even represent a

shrinkage of the node length (the node length increase is negative), violating the assumptions of the BOL model. Apparently, the correlation coefficient alone is not an adequate indicator. The reasoning of Grassi *et al.* in this matter is flawed and has no physical counterpart, so that their conclusion is invalid. In order to reach solid conclusions in this matter, more statistical data on man-made formations is needed by performing new, original research. This is the basis of an ongoing study carried out by myself and others, to be published later this year.

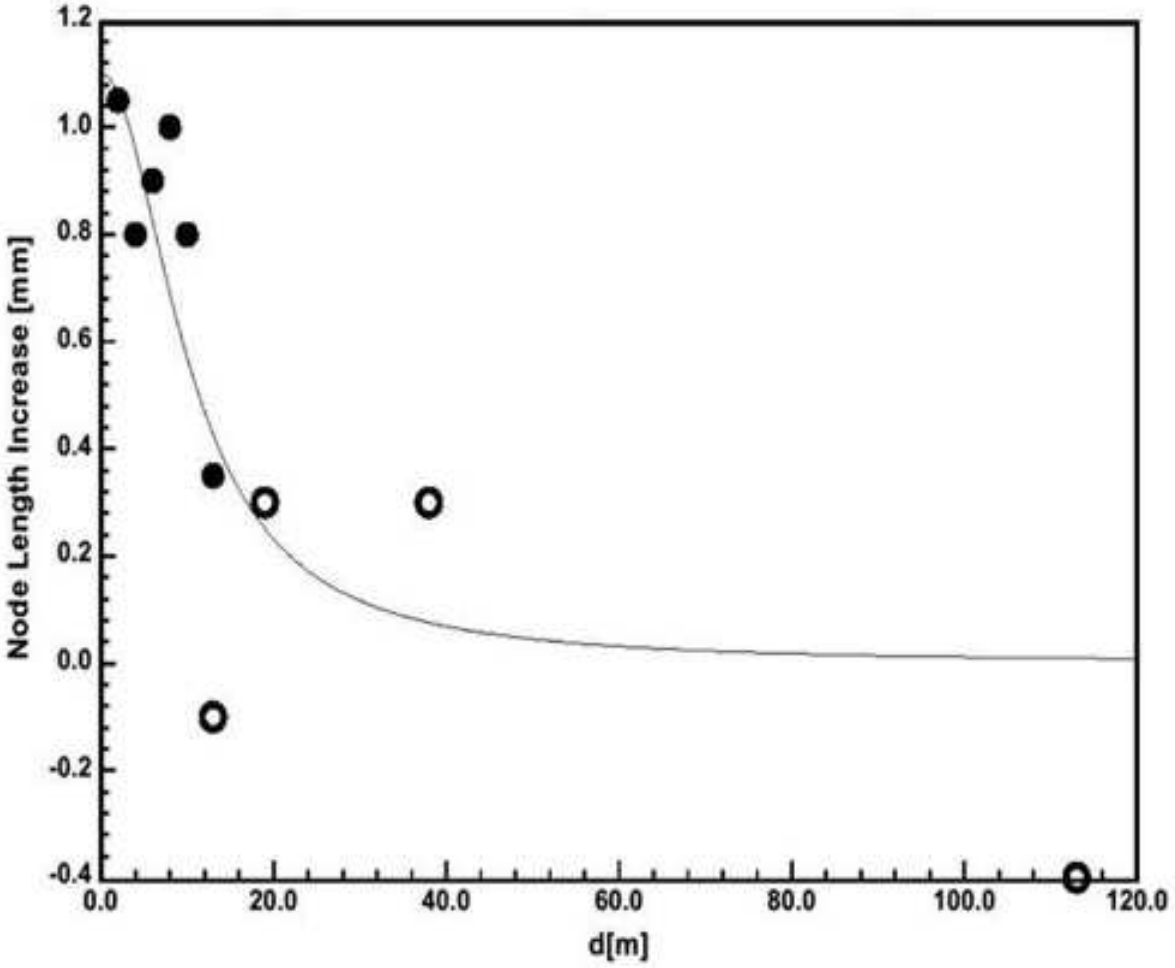

Fig. 1. Analysis of the Nieuwerkerk formation as carried out by Grassi et al. Horizontal axis: distance from circle center; vertical axis: node length increase. The open dots represent data added by Grassi et al. According to the authors, these improve the fit to the BOL model (indicated by the solid curve). However, the horizontal coordinates of the three rightmost open dots are not correct, whereas two open dots correspond to node length decrease, hence violating the BOL model.

Summarizing, Grassi *et al.* conclude that the findings presented by BLT (Levengood 1994; Levengood and Talbott, 1999) demonstrate nothing but a difference in node elongation between flattened and upright plants, which could be the result of whatever flattening mechanism. Their conclusion is in line with their erroneous statistical analysis, for which each data pair is incorrectly interpreted as the result of a single stem measurement. In reality, however, all reported variances in node length were statistically significant, with a clear correlation to the geometrical imprints in the field, i.e., depending on the linear distance from the imprints. The fact that this crucial aspect of the two BLT papers was not recognized by Grassi *et al.* renders most of their statements invalid.

Despite the fact that I would have preferred a more open and particularly a more honest communication, I would like to thank Mr. Grassi and his co-authors for their interest in our work. Their recommendations will be considered for future research.

Eltjo H. Haselhoff

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References

Grassi, F. (2006). Personal communication.

Grassi, F., Cocheo, C., & Russo, P. (2005). Balls of light: the questionable science of crop circles. *Journal of Scientific Exploration*, *19*(2), 159–170.

Haselhoff, E. H. (2001). Opinions and comments on Levengood WC, Talbott NP (1999). *Phys. Plantarum*, *111*, 123–125.

Levengood, W. C. (1994). Anatomical Anomalies in Crop Formation Plants. *Phys. Plantarum*, *92*, 356–363.

Levengood, W. C., & Talbott, N. P. (1999). Dispersion of Energies in World Wide Crop Formations. *Phys. Plantarum*, *105*, 615–624.

Grassi, Cocheo, and Russo's Reply

Haselhoff's remarks are welcome, but unfortunately they are not relevant, as we are going to explain.

About the BOL model complexity: to make a simple model is good, but to make it unrealistic is not. Factors can be eliminated only after their impact has been estimated as unimportant; no such assumption can be made without an analysis. In particular, the transparency of the tissue to the radiation looks like a relevant factor that should not be eliminated without justification: a perfectly transparent tissue would not be affected at all, while a non-transparent stem would partially shield its nodes from radiation, depending on the incidence angle. The correctness of a model is independent of whether the environment is controlled or not. It is obvious that a more complex model may require more data to be validated, but this can hardly justify not making a correct model.

Haselhoff [1] already tried to justify some weak points of his paper on the basis that it was a mere comment; as we explained [2], we think it is not a valid justification. The ‘‘apparently genuine’’ witness and film evidence for BOLs mentioned by Haselhoff is questionable for scientific purposes. A survey would be out of place here; we just supply a few links [3] to some information about the only named witness in Haselhoff's comment paper so that the reader can judge how ‘‘apparently genuine’’ his claims are.

About our supposed misunderstanding of BLT's and Haselhoff's data handling: although Haselhoff seems to disagree, BLT never wrote (in any of their scientific papers, at least) about t-tests on the data of the Devizes, Chehalis, and Sussex formations. The claims by BLT and

Haselhoff that we discussed were based only on those three formations. BLT did mention t-tests for other data (Beckhampton, Maryland) and that is all. Should we—or anybody—be expected to guess about unpublished tests? However, t-tests should be addressed to compare the averages of the sample groups collected, but, as we clearly stated in our conclusions, we did not dispute the average difference between samples collected in and out of the formation; rather, we highlighted the lack of a reliable criterion for labelling the data as ‘‘affected’’ or ‘‘control’’.

We computed the *p*-value for h^2, not for *h*, because errors propagate from the data to h^2 in the model, so h^2 is the term whose significance has to be taken into account. Interpreting that term as the square (or cube or n^{th} power) of something else does not change the model curve.

It is curious that Haselhoff points out that we ‘‘incorrectly’’ handled the data as if they were single samples because that is exactly how he and BLT handled them in their regressions; should they have taken the number and variance of samples into account, the resulting correlation coefficients would have been much lower. Maybe the result would have been significant, but a significant mismatch. Since there may be some rationales for regressing the data in that way, instead of raising another issue, our goal was just to evaluate the significance of their regressions—just as they were. However, our first remark in this area was (and is) that both the number of circles taken into account and the number of samples collected in each are inadequate for a reliable statistical analysis; many of the specific problems we discussed are just a consequence.

Haselhoff misrepresents his and BLT’s work when he states that they just found apparently non-random patterns deserving—in their opinion—of further study. First, the alleged t-tests mentioned by Haselhoff would not support the presence of any pattern anyway, but only the undisputed fact that in any circle— known man-made formations included—inner plants have longer nodes than outer

ones. But even if the existence of a generic decrease-with-distance trend should be proved, it would be a very humble and unsurprising conclusion because it would bear no indication of any specific cause; possible causes include mundane factors such as the dynamics of wind near the circle borders and the behavior of circlemakers. On the contrary, the titles of their papers contain words like ‘‘anomalies’’ and ‘‘energies’’ and the texts go far beyond. We already replied to Haselhoff’s past minimization attempts [2].

About Nieuwerkerk: the position of the control samples is not so wrong. Haselhoff [4] sent us a file listing the sample values and distances from the center of a circle; he only recently informed us that the control samples were taken at the listed distances, but from *another* circle in the same formation [4]. However, those two circles were identical under all respects due to the symmetry of the formation, and there is no reason to suppose different creation mechanisms, and thus we fail to appreciate the relevance of Haselhoff’s comment.

Anyway, even accepting that supposition and using the corrected distance from the corrected circle, the correlation coefficient does not change significantly. About Haselhoff’s other comments on the same circle: he would be correct if we ever claimed that the Nieuwerkerk circle (a known man-made formation) had actually been created by a BOL. Of course, we never did; our purpose was entirely different. BLT’s and Haselhoff’s conclusions were based on just three crop circles, each one sampled in just a few points with no bidimensional information. Moreover, the classification of samples as ‘‘affected’’ or ‘‘control’’ looked arbitrary and decided after the values were known; no comparison with alternative and possibly better fitting or physically more founded models was tried. Isn’t this procedure questionable? Can’t it lead to spurious positive-looking results? Not only did we explain the reasons, but we added an example. We considered the known man-made Nieuwerkerk circle, which Haselhoff sampled and used as an example of a negative result, and we handled it in the same way the other circles had been. We

averaged two data sets, taken along different radii, both to eliminate the bidimensional information (anyway, as a consequence of the BOL spherical symmetry, no changes have to be expected by varying the direction of the radius, the only variation depending on the distance from the center) and to reduce the number of samples (to seven), so that no more information was available about that circle than it was for the other ones, in order to allow for a fair comparison. Then we aggregated the data as affected/control in various sensible ways, showing how the resulting correlation coefficient was affected by an arbitrary choice of each of them; the way mentioned by Haselhoff was just the last one. We do agree that the positive-looking result we obtained with a few arbitrarily aggregated data should not be taken seriously, but that exactly proves our point that Haselhoff seems to miss. He misses it even more when he proposes that if any sample value is less than the control level (an apparent ‘‘shrinking’’), then the model should be rejected. He cannot really think that nodes near man-made circles do shrink; that is just data variability and is already adequately handled by statistical tests. Nonetheless, we would accept Haselhoff’s rule if only it had been stated in advance; adjusting criteria after looking at the results is exactly one of the questionable practices we criticized.

Finally, about the Nieuwerkerk circle, Haselhoff concludes with the admission that ‘‘apparently, the correlation coefficient alone is not an adequate indicator’’. This is exactly our criticism of his work. We agree with him: a correlation coefficient alone is not an adequate indicator. But that is the only indicator used by Haselhoff himself to try to demonstrate the existence of a BOL. So, Haselhoff himself is admitting that the whole *corpus* of his work is supported only by an indicator whose adequacy is questionable.

We would also like to point out that Haselhoff’s reply does not address several points we made, for example, the incoherence of the proposed physical mechanism (thermal dilation of water) and the exclusion of several data from the analysis (central tufts, Beckhampton circle).

In conclusion, Haselhoff's remarks are welcome, but they do not contribute to make his paper more reliable, nor to invalidate our criticisms of it.

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References

1. http://www.cicap.org/crops/en/011.htm. Accessed 26 July 2007.

2. http://www.cicap.org/crops/en/012.htm. Accessed 26 July 2007.

3. http://www.cicap.org/crops/en/cache/001.htm#i1. Accessed 26 July 2007.
http://www.cicap.org/crops/en/cache/002.htm#i6. Accessed 26 July 2007.
http://www.cicap.org/crops/en/cache/003.htm. Accessed 26 July 2007.
http://www.cicap.org/crops/en/cache/004.htm (for witness identity verification). Accessed 26 July 2007.

4. Haselhoff, E. H. (2001). Personal communication.

5. Haselhoff anticipates the exchange in the *Journal of Scientific Exploration*

Introduction

Before the *JSE* published the previous exchange (Section 4 of this Appendix) in October 2007, on 1 August 2007 we were very surprised to receive the following e-mail from Eltjo Haselhoff, commenting on matters that had not yet been disclosed officially. We also discovered that the same e-mail had been sent as a copy by Haselhoff to other people, who began disseminating it on the Internet.

Haselhoff's e-mail

Belluno, August 1, 2007

Ciao Francesco,

I just received the proofs of the upcoming publications in the *Journal of Scientific Exploration* and read your (lengthy) reply. I think the editor took the right decision calling a halt to the discussion, after this publication.

Although I have the impression that you understand my concerns better than you pretend, I will try to explain it once more, when you write that:

"It is curious that Haselhoff points out that we incorrectly handled the data as if they were single samples because that is exactly how he and BLT handled them in their regressions".

As explicitly stated in my article, I was not referring to the regressions, but to all the p-values, as published in your tables 2a and 2b (page 166 of your article). Those are all wrong, because you should have calculated them including every single stem measurement, not only the averages of each sampling point.

Consequently, all your claims about the lack of statistical significance, so rigourously propagated by CICAP over the Internet and elsewhere, are *wrong*. Sorry!

All results are statistically significant, trust me. This is really very basic statistics theory, and if you still don't get it, I really would not know how to explain it in a simpler way. But like I said, I have a strong feeling you already know exactly what I'm talking about, because in your reply you don't mention a word about your p-values, nor about your claims about the lack of statistical significance, even though it was one of my major points of concern.

I leave you the honor to have the last word in this, but do not expect a reaction anymore from my side. It would not lead to anything, and my time is precious and scarce. To me, personally, it is clear how the cards are shuffled, and we have provided enough public material for anyone else to form a well-funded opinion, with just a little bit of intellectual effort. Moreover, I have lost my faith in your integrity because I think your attitude and behaviour so far have been quite devious.

Nevertheless, I have amused myself. So thanks, and take care,

Eltjo.

6. Grassi et al.'s reply to Haselhoff's e-mail

Dear Eltjo,

your last public messages (July-August 2007), including the open letter we are replying to, anticipated our exchange in the *Journal of Scientific Exploration*. We think it is not correct at all to comment something still unpublished, because readers have no access to the text being commented and thus cannot make their own informed

opinion. Thus we waited. Our exchange was published in the October issue of the *JSE*, so this looks like a good time for our reply.

You didn't need to explain your concerns again; we got them right the first time and we already replied in the pages of the JSE. When you claimed that we handled the data as single samples (N = 1) instead of set averages (N > 1), we perfectly knew that you were not referring to the regressions, but only to the *p*-values in our tables; our reply was – and is – that you cannot split the two things, because we computed the *p*-values of those regressions. You should at least always handle your data either as single values, or as set averages, throughout the whole analysis; you cannot "switch" the multiplicity of the samples on and off at your convenience. We do agree with you that this is basic statistics theory.

Therefore, it escapes us completely why you wrote that we "don't mention a word about" our *p*-values, nor about our "claims about the lack of statistical significance" (which is actually the same thing, since *p*-values are a measure of significance). We did write about the issue:

> It is curious that Haselhoff points out that we "incorrectly" handled the data as if they were single samples because that is exactly how he and BLT handled them in their regressions; should they have taken the number and variance of samples into account, the resulting correlation coefficients would have been much lower. Maybe the result would have been significant, but a significant mismatch. ... our goal was just to evaluate the significance of their regressions – just as they were.

You wrote that your time is precious and scarce and that we should not expect any more reaction from your side. The only impact of your decision on us will be that we'll not need to reply any more, so saving our time, which is no less precious and scarce than yours, believe us. Causing reactions has never been our purpose; we wanted to comment your piece of "comments and opinions" published on *Physiologia Plantarum*, and we did it.